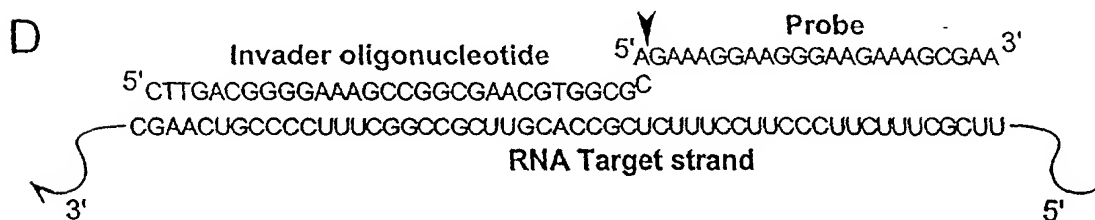
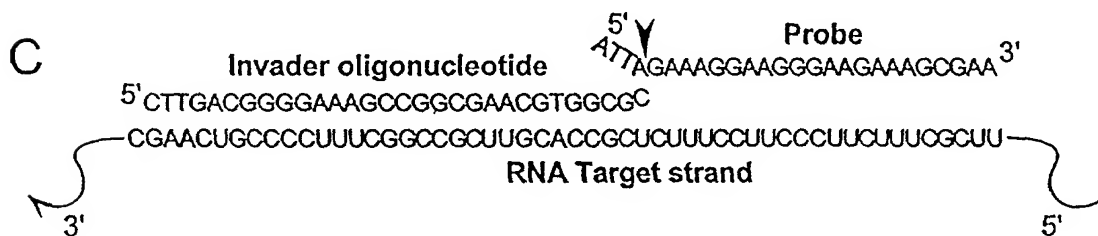
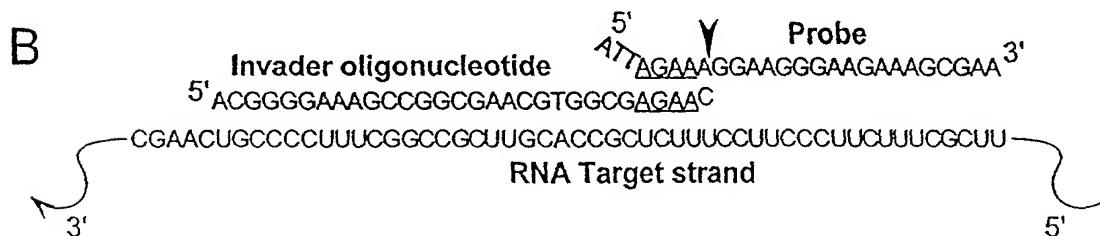


FIGURE 1

11

FIGURE 2



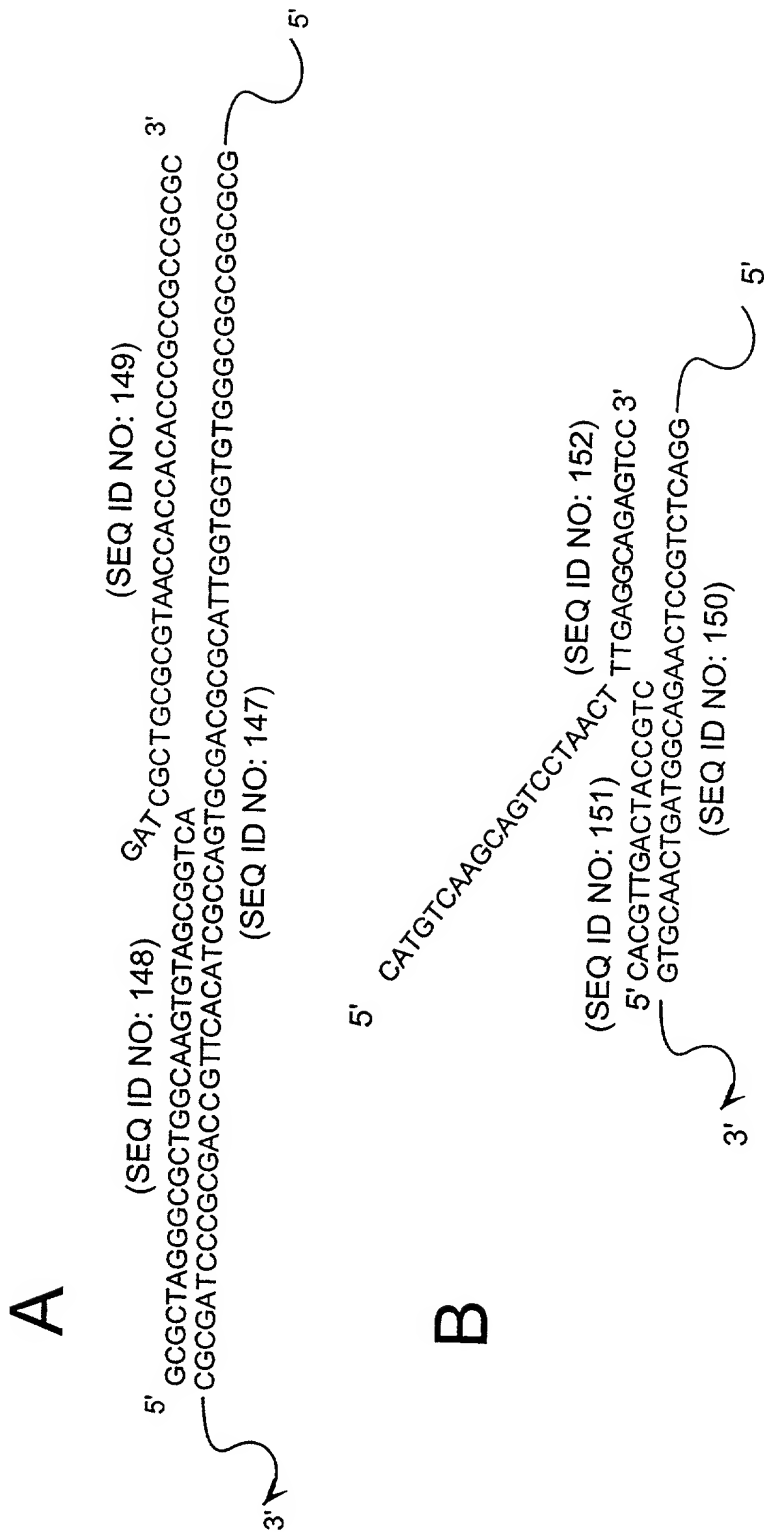


FIGURE 3

10004379 0P2002

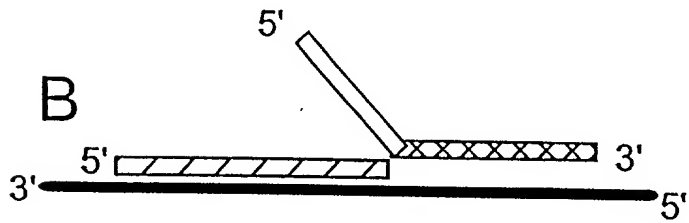
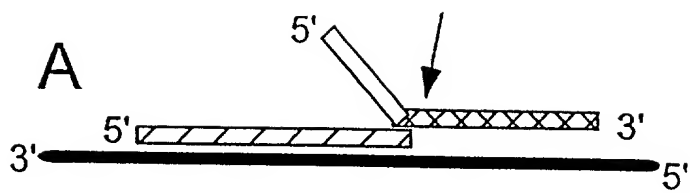


FIGURE 4

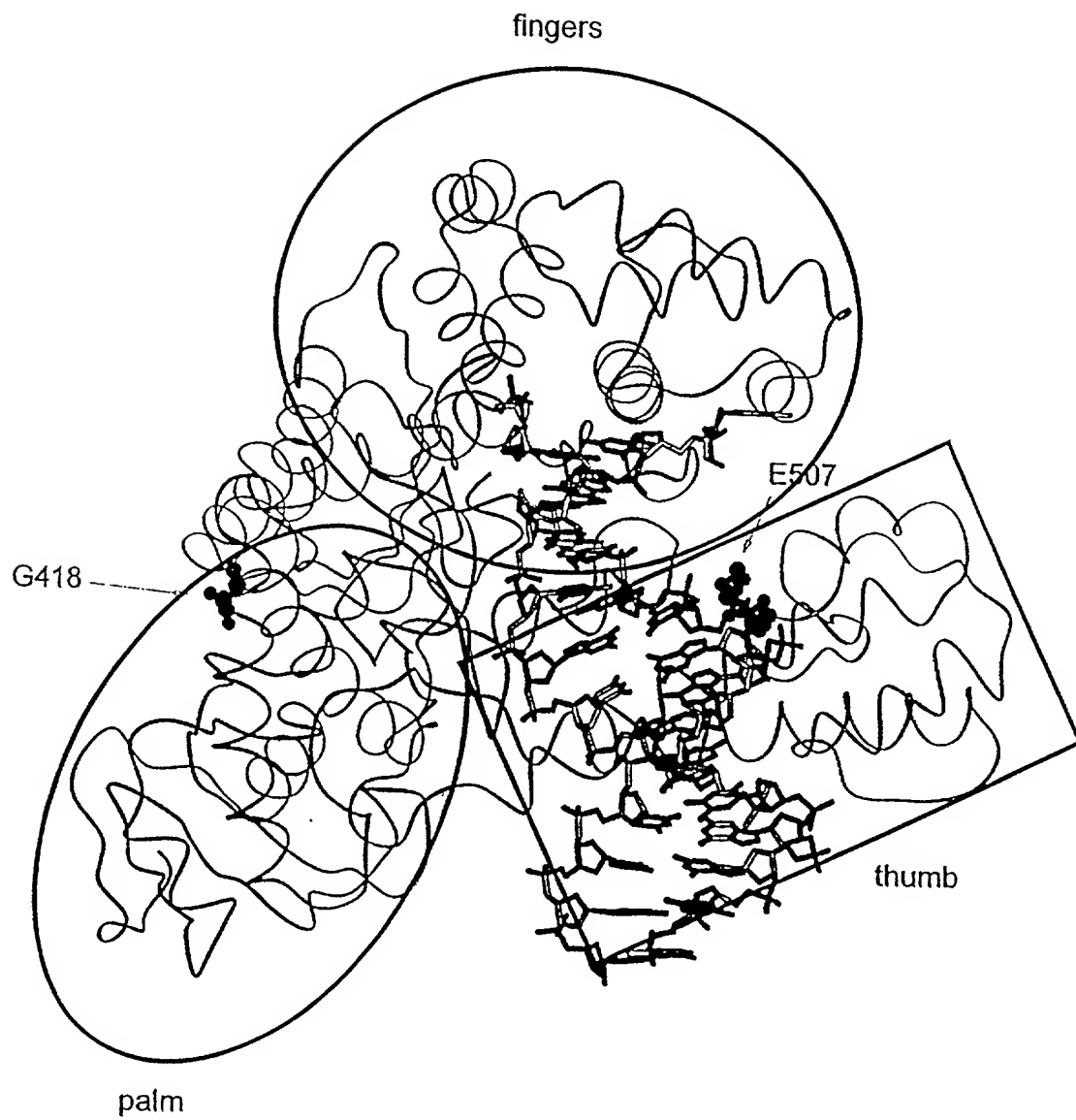


FIGURE 5

6/

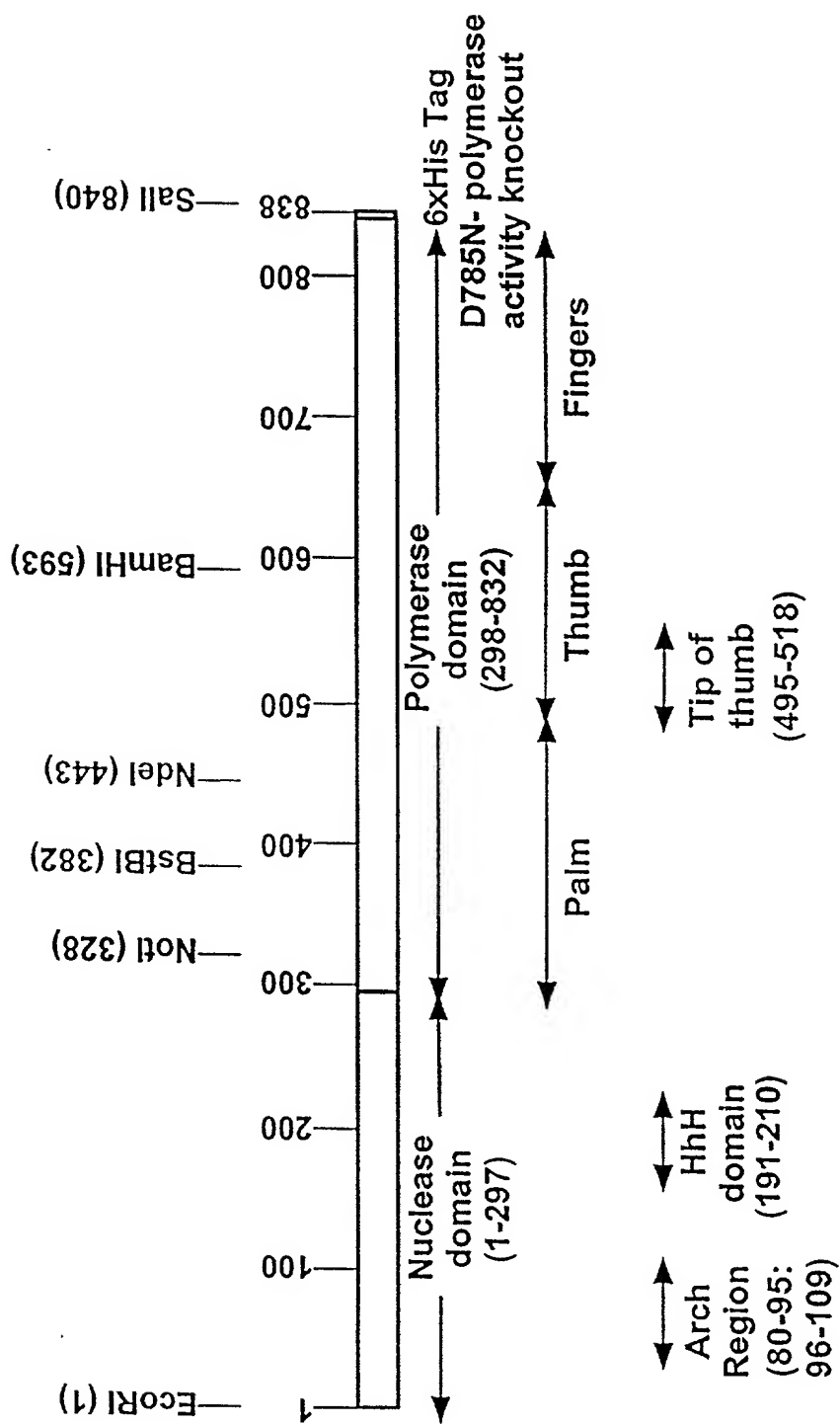


FIGURE 6

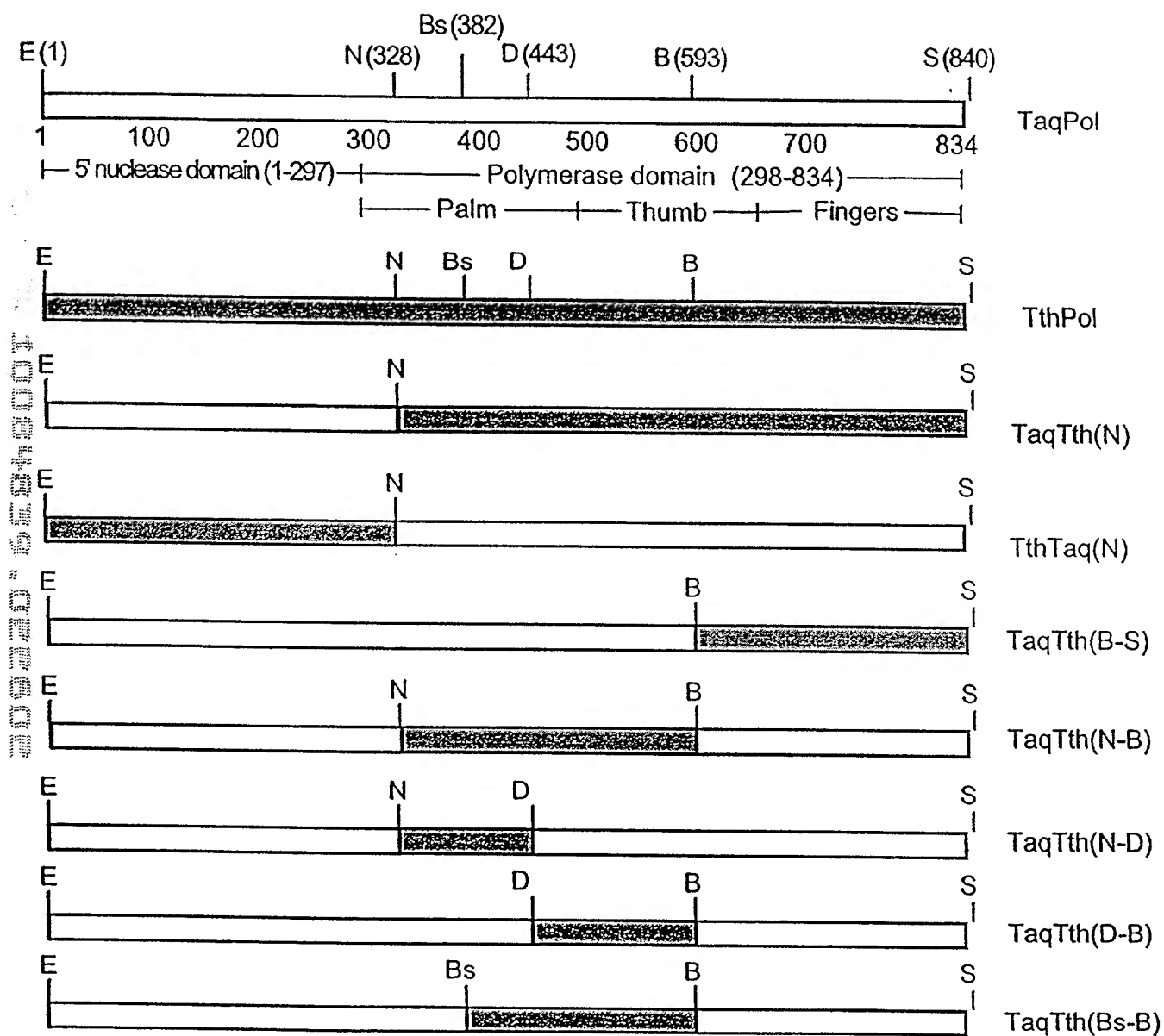


FIGURE 7

FIGURE 8A

MAJORITY [SEQ ID NO:150] ATGXXGGGGATGCTTCCCTCTTTGAGCGCAAGCGCGGTCCTCCTGCTGGAGGGGACGAGCTGGCGT

DNAPTAQ [SEQ ID NO:153]... AG..G.....G.....G..... 70
 DNAPTFL [SEQ ID NO:154].....G.....G.....G..... 67
 DNAPTTH [SEQ ID NO:155]... GA.....G.....A..... 70

MAJORITY ACGGCACGCTTCTTGGCGCTGAAGGGGCTGACCACGAGCGCGGGGCAAGCGGTCGAGGGGCTACGGGCTT

DNAPTAQGA..... 140
 DNAPTFLT.....G.....G.....C..T..... 137
 DNAPTTHG.....G..... 140

MAJORITY CGCGAAGAGCGCTCCTCAAGCGGCTGAAGGAGGAGCGGGGACXXGGGGTGCTGCTGCTTTGAGCGGCAAG

DNAPTAQC.....A..... 207
 DNAPTFLA.....GT..T..... 204
 DNAPTTHT.....T..AA..G..GT..... 210

MAJORITY GCGCGGCTGCTTGGGGCAGGAGCGGCTAGGAGGCTACAAAGCGGGGCGGGCGCCACCGGGAGGAGCTTTC

DNAPTAQG..GG.....G..... 277
 DNAPTFL 274
 DNAPTTHGA.....G.....G.....C. 280

MAJORITY GCGGGCAGGCTCGCGGCTGATCAAGGAGGCTGCTGGAGCTGCTGGGGGCTTGGCGGGCTCGAGGTCGGCGGGCTA

DNAPTAQA.....G.....G..... 347
 DNAPTFLG.....T.....A..C....T...G..G....T.....T 344
 DNAPTTH 350

FIGURE 8B cont.

MAJORITY [SEQ ID NO:156]	CGAGGGGAGGAGGTGCTGGGACCGCTGGCCAAAGAGGGGAAAGGAGGGGTACGAGGTGGGGATGCTC	
DNAPTAQ [SEQ ID NO:153]	.....G.....G.....C.....C.....C.....C.....C.....C.....	417
DNAPTFL [SEQ ID NO:154]	.....G.....G.....CG.....	414
DNAPTTH [SEQ ID NO:155]	.....T..C.....	420
MAJORITY	ACGGCGGAGCGGAGCGTCTACGAGCTCGTTTCGGACGGCATCGCCGTCCTCCACCGCGAGGGGTACCTGA	
DNAPTAQ	.....AAA.....T.....GA.....	487
DNAPTFL	..T.....G..G.....A.....T.....G..	484
DNAPTTH	.....A..G.C.....G.....CG.....	490
MAJORITY	TCACCGCGCGGCTGGCTTTGGGAGAAAGTACGGCCCTGAGCGCGGAGGAGTGGGTGGACTACGGGGCCCTGGC	
DNAPTAQ	.....C.....A.....C..C.....CG.....A..	557
DNAPTFL	.....AC.....G.C.....T..C.....C..T	554
DNAPTTH	.....A.....C.....T..C.....C..T	560
MAJORITY	GGGGAGCCGCTCGGACAACCTCGCGGGGGTCAAGGGCATCGGGGAGAAAGCGCGCGXGAAGCTCGTGCXAG	
DNAPTAQ	G.....GAG.....T.....G..GAG.....T..GG..	627
DNAPTFL	.....G..T..A.....G.....A..G.....A..CGC	624
DNAPTTH	.....TC.....A..	630
MAJORITY	GAGTGGGGAGCGCTGGAAAACCTCCTCAAGAACCTGGACCGGGTGAAGCCCGC...XTCCGGGAGCAAGA	
DNAPTAQ	.....GC.....C.....A.....	694
DNAPTFL	.....T..C..C.....A.....T...T..G.....G	691
DNAPTTH	.....A.....A.....A.AAA.G.....	700

DNAPTAQ	.....G.....	C..C..G..T.A..AA.C..C.....	G.....	C..	1044
DNAPTFL	T.GG..GT.....	G..CC...T.....A.....C.....	G.....	T.....	1041
DNAPTHH	....TG.....C.....	G.....G.....GGC...G..A.A.....	C.....	C.....	1050

FIGURE 8D
200210-54342001

MAJORITY [SEQ ID NO:156] GGGGGXCTCCTCGGCCAAGGAGCTGGCCGTTTTGGCCCTGAGGGAGGGCGCTXGACCTCXTGGCGGGGGGACG

DNAPTAQ [SEQ ID NO:153]G..T.....A.....AG....C.....A.....T..G....CG.....C.... 1114
 DNAPTFL [SEQ ID NO:154]AA....G.....G.....C.....G.....T..G....A..A..... 1111
 DNAPTTH [SEQ ID NO:155]C.....C.....C.....TC.....G..A.....G.....G..... 1120

MAJORITY AGCCGATGCTCCTCGCCCTACCTCCTGGAGCCCTCCAAACACCCCGGAGGGGGTGGCGGGGGCGGTACGG

DNAPTAQT.....T..... 1184
 DNAPTFLT.....T..... 1181
 DNAPTTHG.....G..... 1190

MAJORITY GGGGGAGTGGACGGAGGAXGGGGGGAGGGGGCGCTCCTXTGGGAGAGGCTCTTCGXGAACGTXXXGGAG

DNAPTAQ C.....G.....G.....T.....GG.....GGC.....GTG..G. 1254
 DNAPTFLT.....A.....GG.....C..G.....A..C...AAA.... 1251
 DNAPTTHC..G.CGG.C.....C..G.....CAT..G.....CGTTA.. 1260

MAJORITY GGGCTTGAGGGGAGGAGGCTCCTTTGGCTTTACGAGGAGGTGGAGAACCCCTTTCCCGGGTCCCTGG

DNAPTAQ A..G.....A.....G.....G.....G.....GCT..... 1324
 DNAPTFLA...A..A..AC.C..G.....G.....G.....G.....GT... 1321
 DNAPTTHC.....A.....C.....C.....A.....C..... 1330

MAJORITY CCCACATGGAGGGCAGGGGGGTXCGGGCTGGACGTGGCCTACCTCGAGGGCGCTXTCCTGGAGGTGGCGGA

DNAPTAQG..C.....T...AG....T..G.....C.. 1394
 DNAPTFLG.....C.....C.....A..C 1391
 DNAPTTHC.....A.....T.....T.....C..T..... 1400

==

MAJORITY [SEQ ID NO:156] GGAGATCGCGCGGCTCGAGGAGGAGGTCTTCGCGCTGGCGGCGGCGGCGCTTCAAGCTCAACTCGCGGGGAG

DNAPTAQ [SEQ ID NO:153].....GC.....CG.....1464
DNAPTFL [SEQ ID NO:154].....G.G....AG..G.....1461
DNAPTTH [SEQ ID NO:155].....T.....G.....1470

MAJORITY CAGCTGGAAGGGTGGTCTTTGACGAGCTXGGGCTTCGCGGCTCGGCAAGAGCGGAGACXGGCAAGC

DNAPTAQG.....A.....1534
DNAPTFLGC.....G.C..G..T.....G..G..A. 1531
DNAPTTHTA.....T.G..G.....C.A.....A.....1540

MAJORITY GCTCGACGAGCGCGGCTGCTGGAGGGGCTXCGXGAGGGCGGCGGCTCGTGGAGAGATCCTGCAGTA

DNAPTAQG.....C.....1604
DNAPTFLT.....G..A.....CGGC.....1601
DNAPTTHG.....A..G.....G...C. 1610

MAJORITY CGGGGAGCTCAGCAAGCTCAAGAACACCTACATXGACGGGCTGGCGXGCTGGTCCACCGCGGAGCGGGG

DNAPTAQG....G.....T.....T....G.A...A.....1674
DNAPTFLA.....A.....G.C...G....A...G... 1671
DNAPTTHG.G.....G..AAG.....G.....1680

MAJORITY CGCCTCCACACCGGCTTCAACGAGACGGGCGGCGGCGGCTTAGTAGCTCGGAGCGCGCAAGCTGC

DNAPTAQA.....T.....C. 1744
DNAPTFLG.....C.....TCG.....1741
DNAPTTHG.....1750

FIGURE 8F 2092210-240001

MAJORITY [SEQ ID NO:156] AGAAGATCGCGGTGGGACGGCGCTGGGGGAGAGGATCGGGGGGGGGCTTGGTGGCGGAGGAGGGGXTGGGT

DNAPTAQ [SEQ ID NO:153].....G..T..G.....A..C.....G...G.. 1814
 DNAPTFL [SEQ ID NO:154].....G.....T.....C..G.....A.....G...G... 1817
 DNAPTTH [SEQ ID NO:155].....GT.....C.....G.....G...T....G 1820

MAJORITY GTTGGTGGCGCTGGACTATAGCCAGATAGAGCTCGGGGTGCTGGCCGACCTCTCGGGGAGGAGAACCTG

DNAPTAQ A.....T.....A.....G.....C..... 1884
 DNAPTFL ..G.....T.....G.....T.....C..... 1881
 DNAPTTHC.....G.....A..... 1890

MAJORITY ATCGGGGTGTTCCAGAGGGGAGGAGATCCAGACCCAGAGCGCGGAGCTGGATGTTCCGGCGTCCCGCGCGG

DNAPTAQC.....GG.....G... 1954
 DNAPTFLT.....G.....TT...G.. 1951
 DNAPTTH ...A.....A.....A..... 1960

MAJORITY AGCGCGTGGACCCCGTGTATCGCGCGGGCGGCGCAAGACCATCAACTTCGGGGTCTCTAGGGCATGTCCGC

DNAPTAQG... 2024
 DNAPTFL ..A..G...A.....T.....G... 2021
 DNAPTTHGG..G.....G..... 2030

MAJORITY GCACGGCGCTCTCGCAGGAGGCTTGGCATCCCGTACGAGGAGGGGTGGCCCTTCATTGAGCGGCTACTTCCAG

DNAPTAQA.....T.....CCA.....T... 2094
 DNAPTFLGG.....T.....A..... 2091
 DNAPTTH ...TA..G.....T...A.....A 2100

MAJORITY [SEQ IDNO:156] AGCTTGGCGAAGGTGGGGCCCTGGATTGAGAAAGACCGCTGGAGGAGGGCAGGGCGGGGGCTACGTGGAGAG

[illegible]

MAJORITY CCCTCTTGGGGGGGGGGGGCTACGTGCGGGACCTCAAGCGCGGGTGAAGAGCGTGGGGAGGGGGCGGA

DNAPTAQ	.....	A.....	A G. G.....	.....	G..	2234
DNAPTFL	.....	.....	T.....	.....	G.....	2231
DNAPTTH	.....	AA. AA.....	.....	.....	CA.....	2240

MAJORITY GCGCATGGCGCTTCAACATGCGCGCTCGAGGGCAAGGGGGGAGGCTCATGAAGCTGGCCATGGTGAAGCTC

DNAPTAQ	.....	T	.....	2304
DNAPTFL	.....	G	.....	2301
DNAPITU	.....	G	.....	2310

MAJORITY TTCCCGGGGCTXCAGGGAATGGGGCCAGGATGCTCCTXCAGGTCACGACGAGCTGCTCCTCGAGGGCGG

DNAPTAQ	A.	GG.			T.		2374
DNAPTFL	T.	C.	G.		TT.	G.	2371
DNAPTTH	C.	C.	G.	C.	C.	CC.	2380

MAJORITY **CGAAAGAGGGGGGAGGCGGTGGCCGCTTGGCCAAAGGAGGTGATGGAGGGGTCATGCCCTGCCCGT**

Sequence	Position
DNAPTAQ	2444
DNAPTFL	2441
DNAPTTH	2450

FIGURE 8H "00000" 6E24300T

MAJORITY [SEQ ID NO:156] GCGCCCTGGAGGTGGAGGTGGGGATGGGGGAGGACTGGCTCTCGGGCGAAGGAGTAG

DNAPTAQ [SEQ ID NO:153]A.....GT.....GA
 DNAPTFL [SEQ ID NO:154]GC.....T.....GT.....
 DNAPTTH [SEQ ID NO:155].....T.....GT.....

2499
 2496
 2505

MAJORITY [SEQ ID NO:159] MXAML PLFEPKGRVLLVDGHHLAYRTFEALKGLTTSRGEVPOAVYGFAKSLKALKEDG·DAVXVVVFDK

TAQ PRO [SEQ ID NO:157] RG.....H.....I..... 69
 TFL PRO [SEQ ID NO:158].....V.V..... 68
 TTH PRO [SEQ ID NO:1] E.....YK..F..... 70

MAJORITY APSFRHEAYKAGRAPTEDPFROLALIKELVDLLGLXRLEVPGEADDVLATLAKKAEKEGYEVRI L

TAQ PROGG.....A.....S..... 139
 TFL PROV.....F.....R..... 138
 TTH PROFT..... 140

MAJORITY TADRDLYQLLSDRIAVLHPGEGYLI TPWLWEKYGLRPEQWVDYRALXGDPDSNLPGVKGI GEKTAXKLLX

TAQ PROK.....H.....D..A.....T..E.....R...E 209
 TFL PROE..I.....Y.....A.....I.....QR..I R 208
 TTH PROV...V.....H...E.....F...V.....L...K 210

MAJORITY EWGSLNLLKNLDRVKP·XXREKI XAHMEDLXLSXXLSXVRTDLPLEVDFAXRRPREPDREGLRAFLELEF

TAQ PROA.....L...AI...L...D..K..WD.AK.....K.....R..... 278
 TFL PROFQH..Q...SL...LQ.G..A.A..RK..Q.H.....GR..T.NL..... 277
 TTH PROENV.....K..L...R..LE..R.....L.OG..... 280

MAJORITY GSLLHEFGLLXPKALEEAPWPPPEGAFVGFVLSRPEPMWAEALLAAXGRVHRAXDPLXGLDLKEV

TAQ PROS.....K.....D.....G.....PE.YKA.....A 348
 TFL PROG..A.....L..SF.....G.WE..L...Q...R.....G. 347
 TTH PROA.AP.....K...G.D.....A..A..K..... 350

MAJORITY [SEQ ID NO:159] RGLLAKDLAVLALREGLDLXPGDDPML LAYLL DPSNNTPEGVARRYGGWTE DAGERALLSERLFXNLXX	
TAQ PRO [SEQ ID NO:157]	S.....G.P.....E.....A.....A...WG 418
TFL PRO [SEQ ID NO:158]	I.....F.E.....A.....QT.KE 417
TTH PRO [SEQ ID NO:1]	S.....V.....AH.....HR..LK 420
MAJORITY RLEGEERLLWLYXEVEKPLSRVLAHMEATGVRLDVAYLOALSLEVAEEI(RR)LEEEVFRLAGHPFNLNSRD	
TAQ PRO	R...R...A.....R.....A...A.....488
TFL PRO	K.....E.....R.....EA.V.Q.....487
TTH PRO	K...H.....L.....490
MAJORITY QLERVLFDELGLPAIGKTEKTGKRSTSAAVLEALREAHPIVEKILQYRELTCLKNTYIDPLPXLVHPRTG	
TAQ PRO	.....S.....D.I.....558
TFL PRO	.....DR.....A...K...557
TTH PRO	R...L...Q.....H.....V...S.....560
MAJORITY RLHTRFNQTATATGRLSSSDPNLQNI PVRTPLGQRI RRAFVAEEGWXLVALDYSQIELRVLAHLSGDENL	
TAQ PRO	.....I.....L.....628
TFL PRO	.....V...V.....627
TTH PRO	.....A..A.....630
MAJORITY IRVFQEGRDI HTQTASWMF GVPPEAVDPLMRRAAKTI NFGVLYGMSAHRLSQELAI PYEEAVAFIERYFQ	
TAQ PRO	E.....R.....Q.....698
TFL PRO	S...G.....G..S.....697
TTH PRO	K.....V.....700

FIGURE 9C

MAJORITY [SEQ ID NO:159] SFPKVRAWI EKTLEEGRRRGYVETLFGRRRYVPDLNARVKSUREAERMAFNMPVGGTAADLMKLA MVKL		
TAQ PRO	[SEQ ID NO:157] E	768
TFL PRO	[SEQ ID NO:158] Y G R	767
TTH PRO	[SEQ ID NO:1] K	770
MAJORITY F PRLXEMGARM LQVHDELVL EAPKXRAEXVAALAKEVMEGVYPLAVPLEVEVGXGEDWLSAKEX		
TAQ PRO	. . . . . E E A R I	833
TFL PRO	. . . . . Q . L D R W . Q L	831
TTH PRO	. . . . . R L QA E A KA M G	835

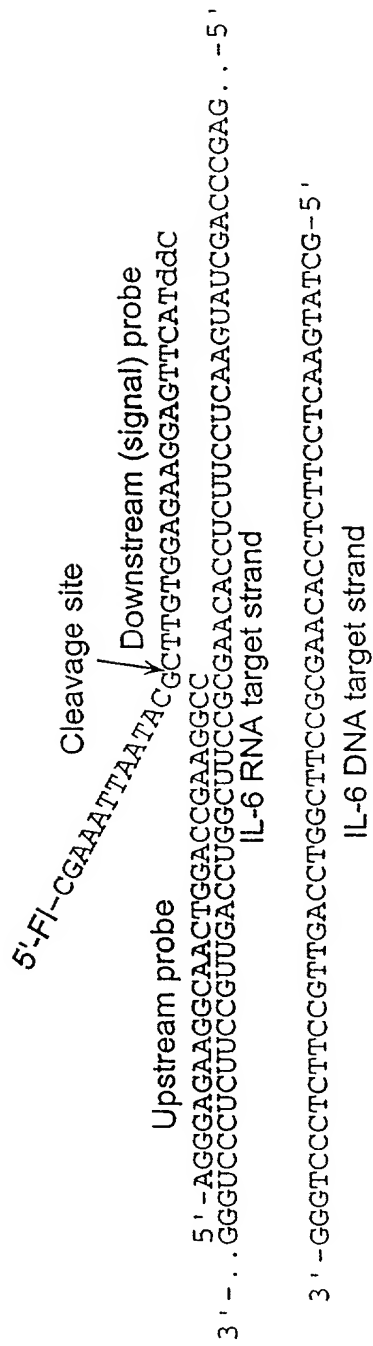
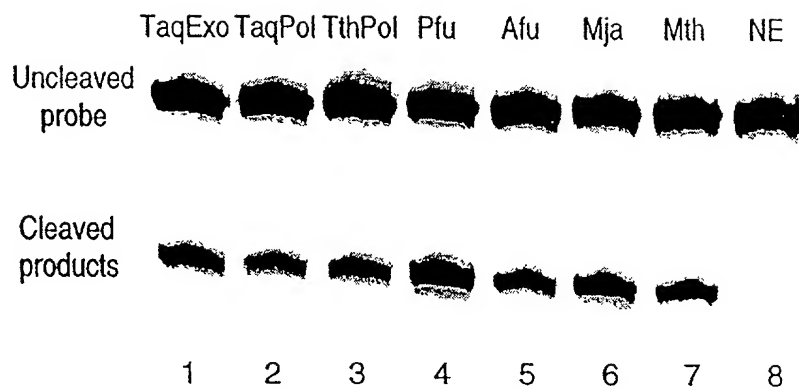


FIGURE 10

1008439.02266
2009220.6548001

A

DNA



B

RNA

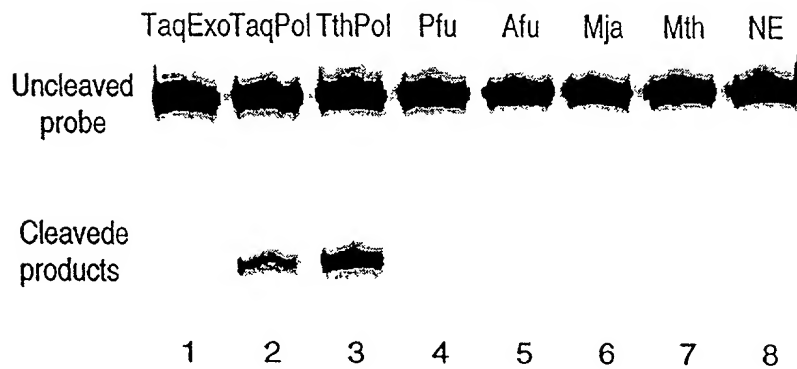


FIGURE 11

21/

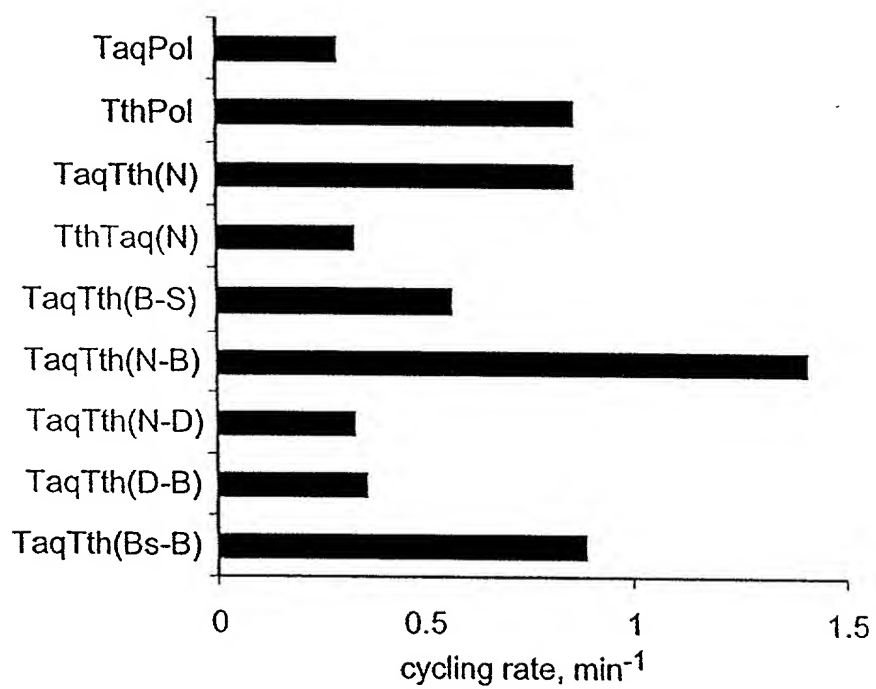


FIGURE 12

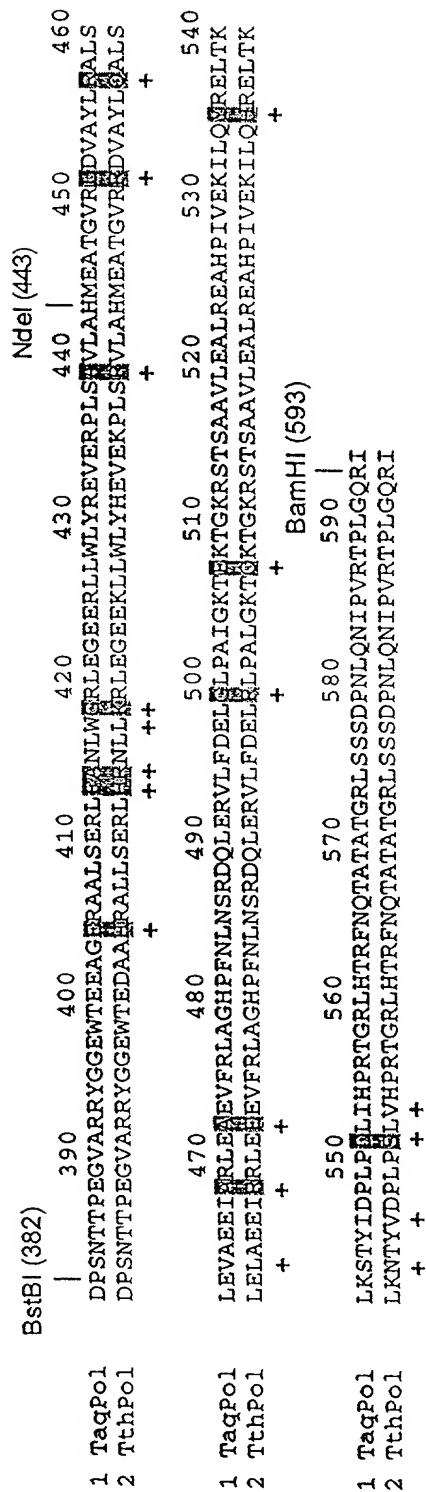


FIGURE 13

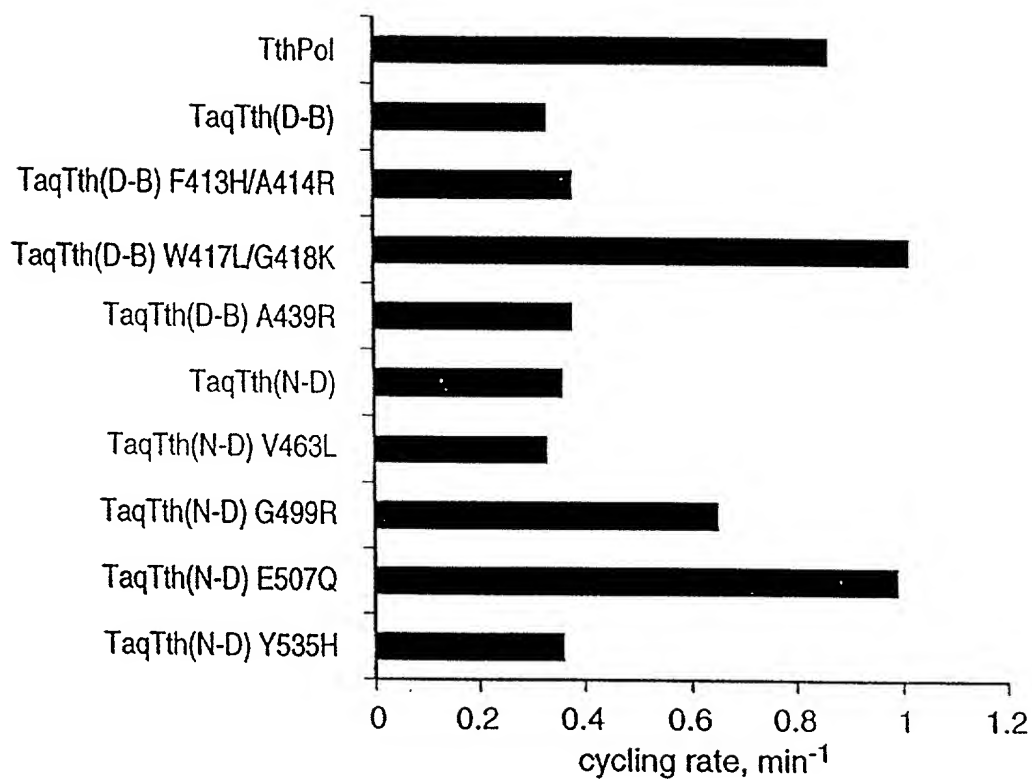


FIGURE 14

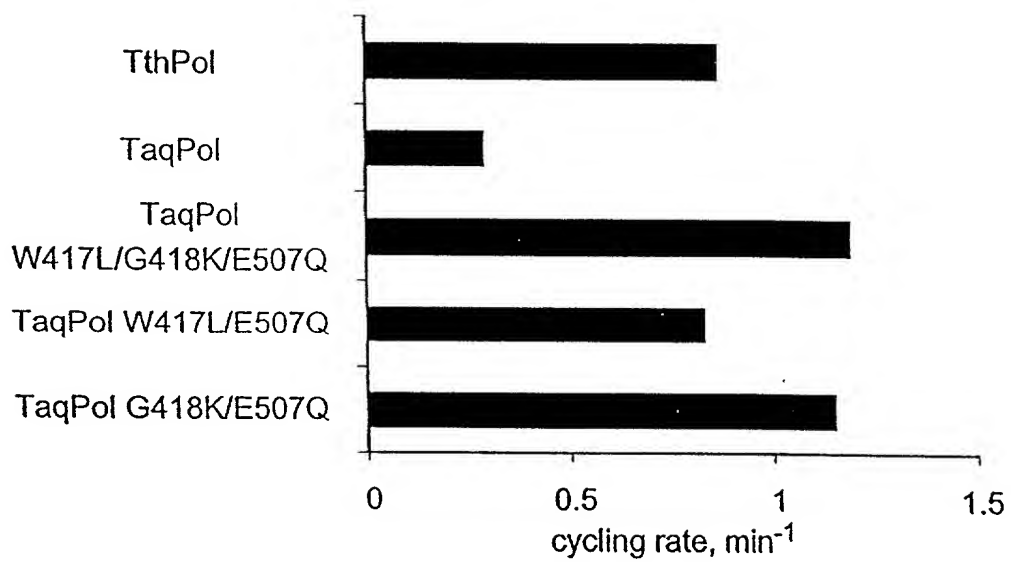


FIGURE 15

		Polymerase Activity Assays	
		<u>% Fl-labeled dUTP incorporated</u>	
		<u>RNA, p(A) or DNA, p(dA) Template</u>	
	<div> <div>Nuclease Domain</div> <div>Polymerase Domain</div> </div>		
Tth		5.8 (1.00)	14.8 (1.00)
Taq		0.8 (0.14)	15.0 (1.01)
TaqTth(N)		4.88 (0.84)	12.9 (0.87)
TaqTth(N-B)		0.58 (0.10)	13.3 (0.90)
TaqTth(B-S)		6.60 (1.14)	14.9 (1.01)
Taq(W417L/G418K/E507Q)		0.42 (0.07)	12.6 (0.85)

FIGURE 16

26/

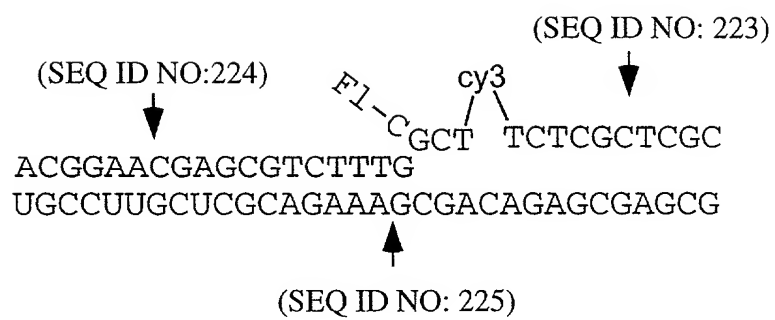


FIGURE 18A

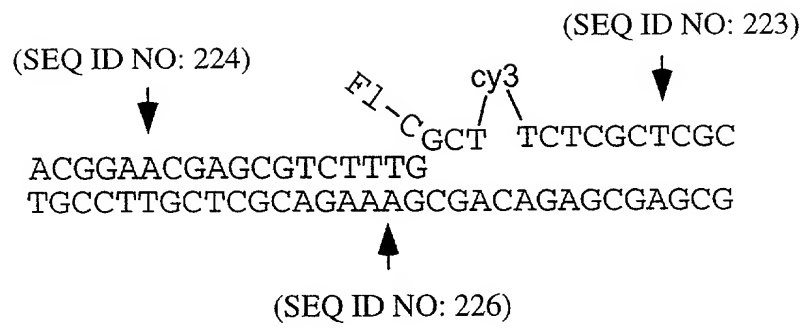


FIGURE 18B

100439.02264

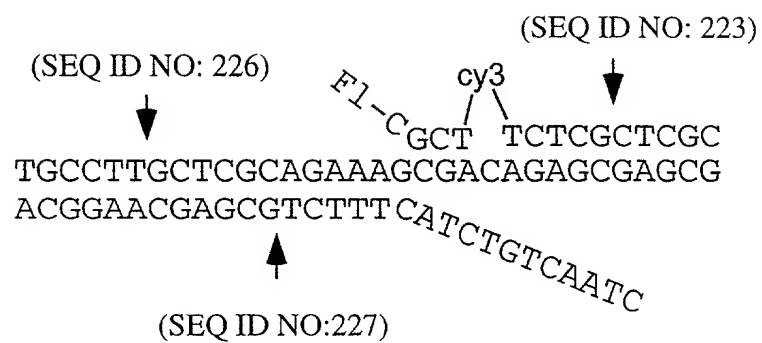


FIGURE 18C

291/

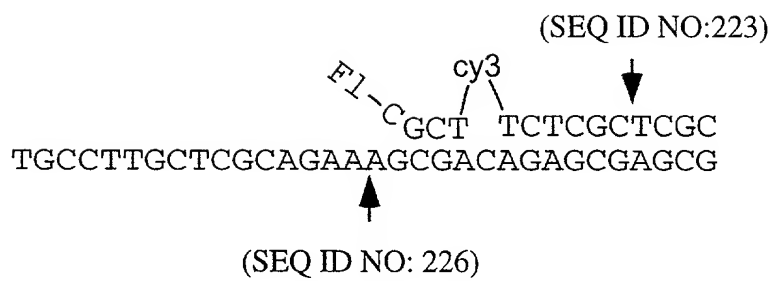


FIGURE 18D

	<u>Turnover Rate (1/min) (Relative Rate)</u>		
	<u>IL-6 RNA Invader Assay</u>	<u>Synthetic r25mer Invader Assay</u>	<u>Synthetic IrT1 Invader Assay</u>
<div> <div> Nuclease Domain Polymerase Domain </div> </div>	0.86 (1.00)	0.29 (1.00)	1.85 (1.00)
TthPol	0.29 (0.32)	0.03 (0.10)	0.05 (0.03)
TaqPol			
	0.86 (1.00)	0.45 (1.56)	3.36 (1.81)
TaqTth(N)	0.33 (0.38)	0.03 (0.10)	0.00 (0.00)
	0.57 (0.67)	0.07 (0.23)	0.15 (0.08)
TthTaq(N)	0.70 (0.79)	0.30 (1.05)	1.70 (0.92)
	1.41 (1.59)	0.40 (1.38)	3.22 (1.74)
TaqTth(B-S)	0.22 (0.25)	0.05 (0.18)	0.05 (0.03)
	0.22 (0.25)	0.10 (0.11)	0.06 (0.03)
TthTaq(B-S)	0.89 (1.04)	0.18 (0.63)	0.71 (0.38)
	0.33 (0.38)	0.08 (0.29)	0.18 (0.10)
TaqTth(N-Bs)	0.32 (0.42)	0.16 (0.54)	0.16 (0.09)
TaqTth(N-D)			
TaqTth(D-B)			

FIGURE 19

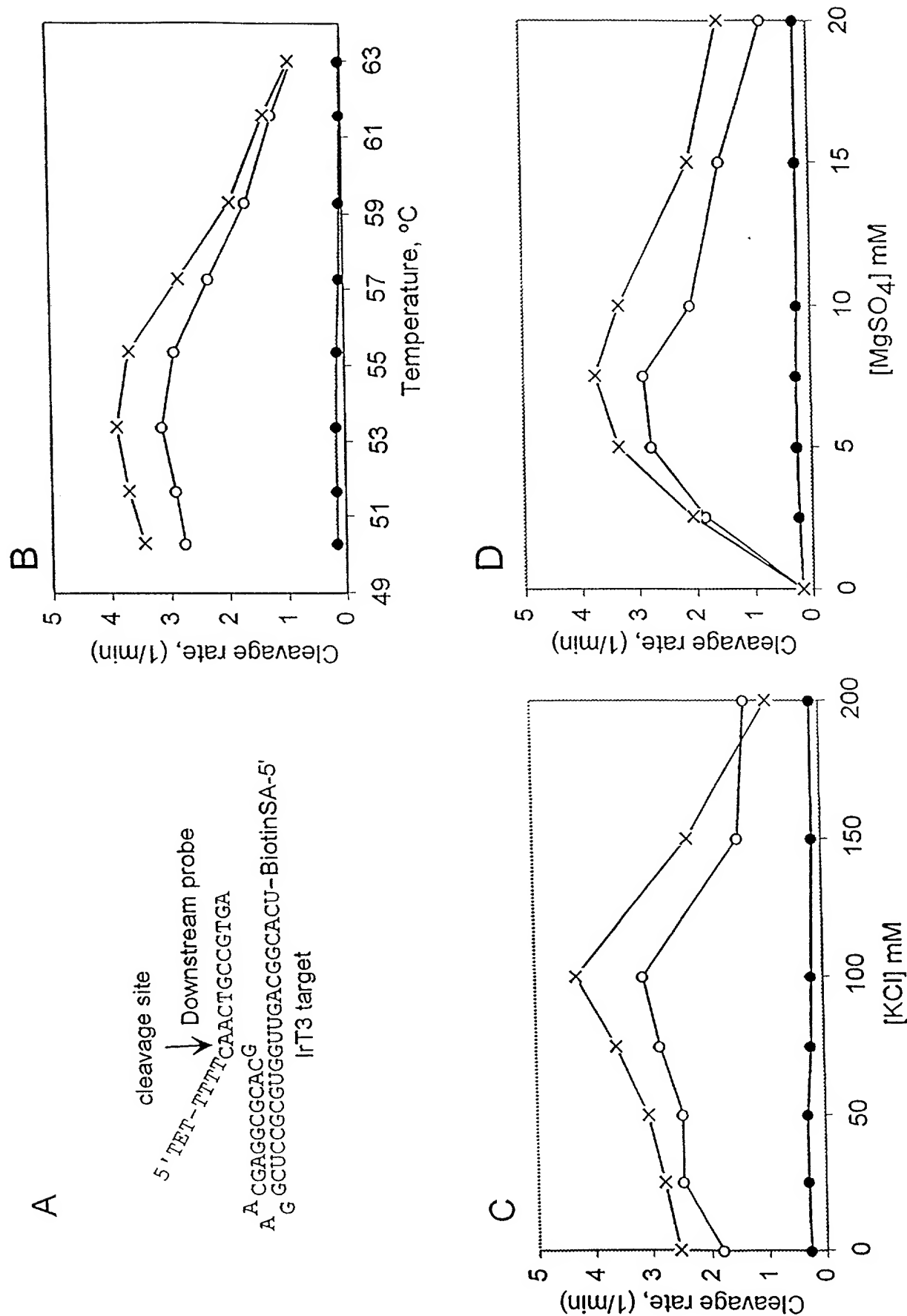


FIGURE 20

FIGURE 21

A

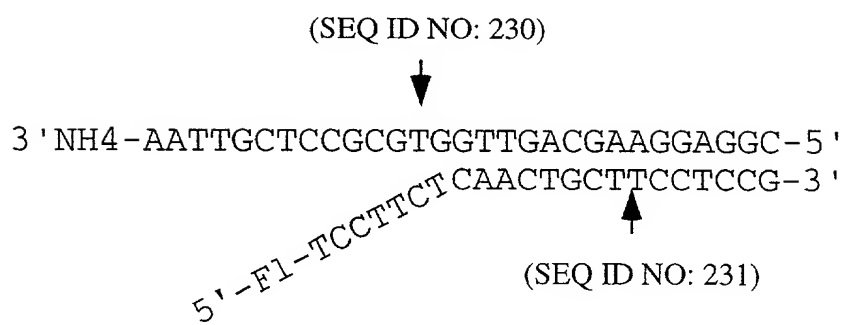
5'-tet-TTTTCAACTGCCGTGA
^ACGAGGCGCACG
^AGCTCCGCGTGGTTGACGGCACT

B

5'-tet-TTTTCAACTGCCGTGA
^ACGAGGCGCACG
^AGCUCCGCGUGGUUGACGGCACU-BiotinSA-5'

FIGURE 22

A



B



FIGURE 23

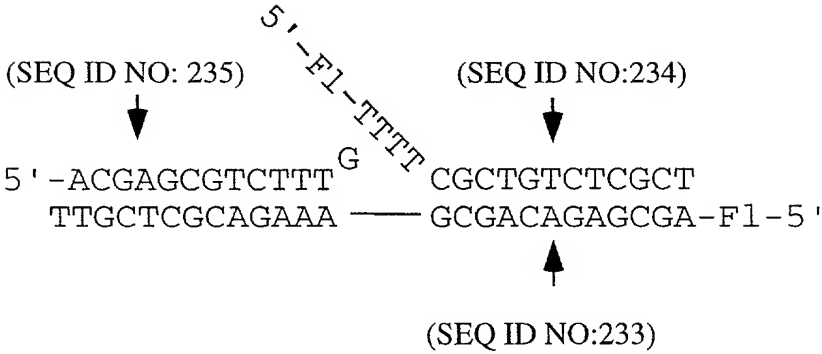
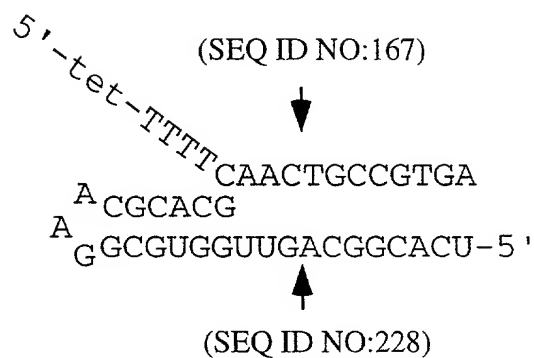


FIGURE 24

A



B



FIGURE 25

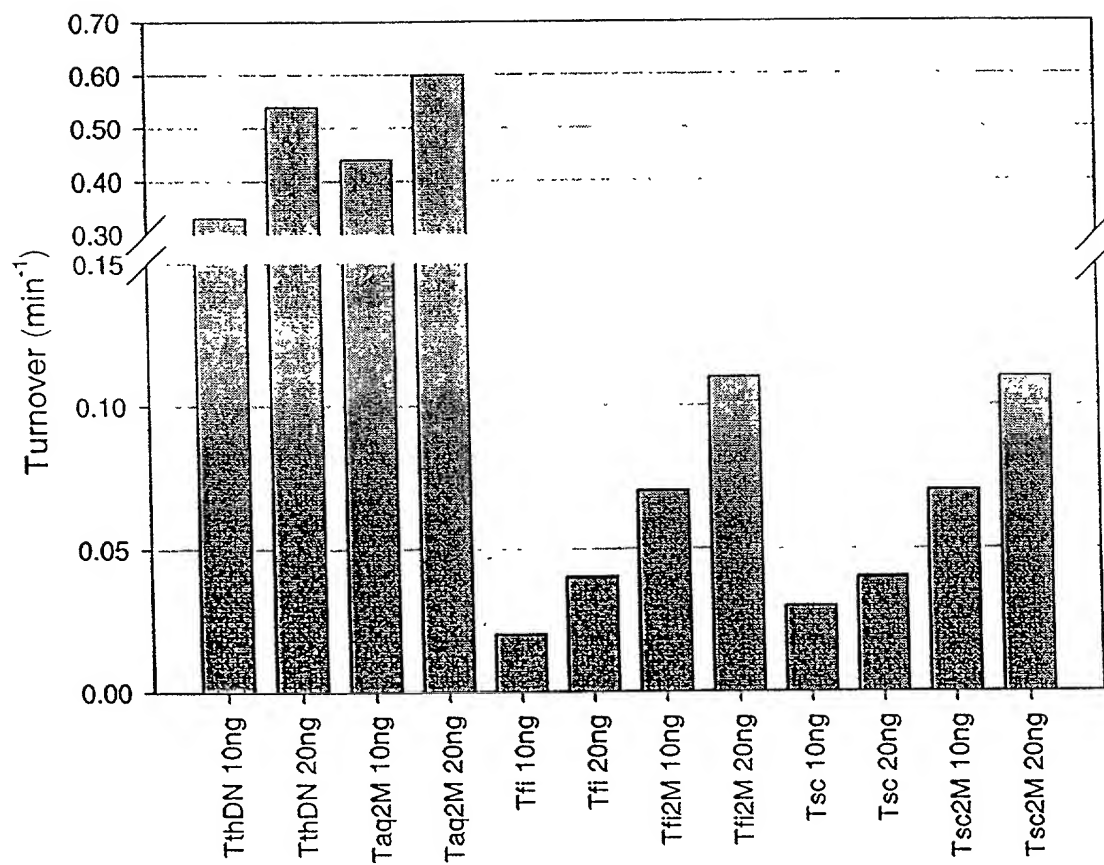


FIGURE 26

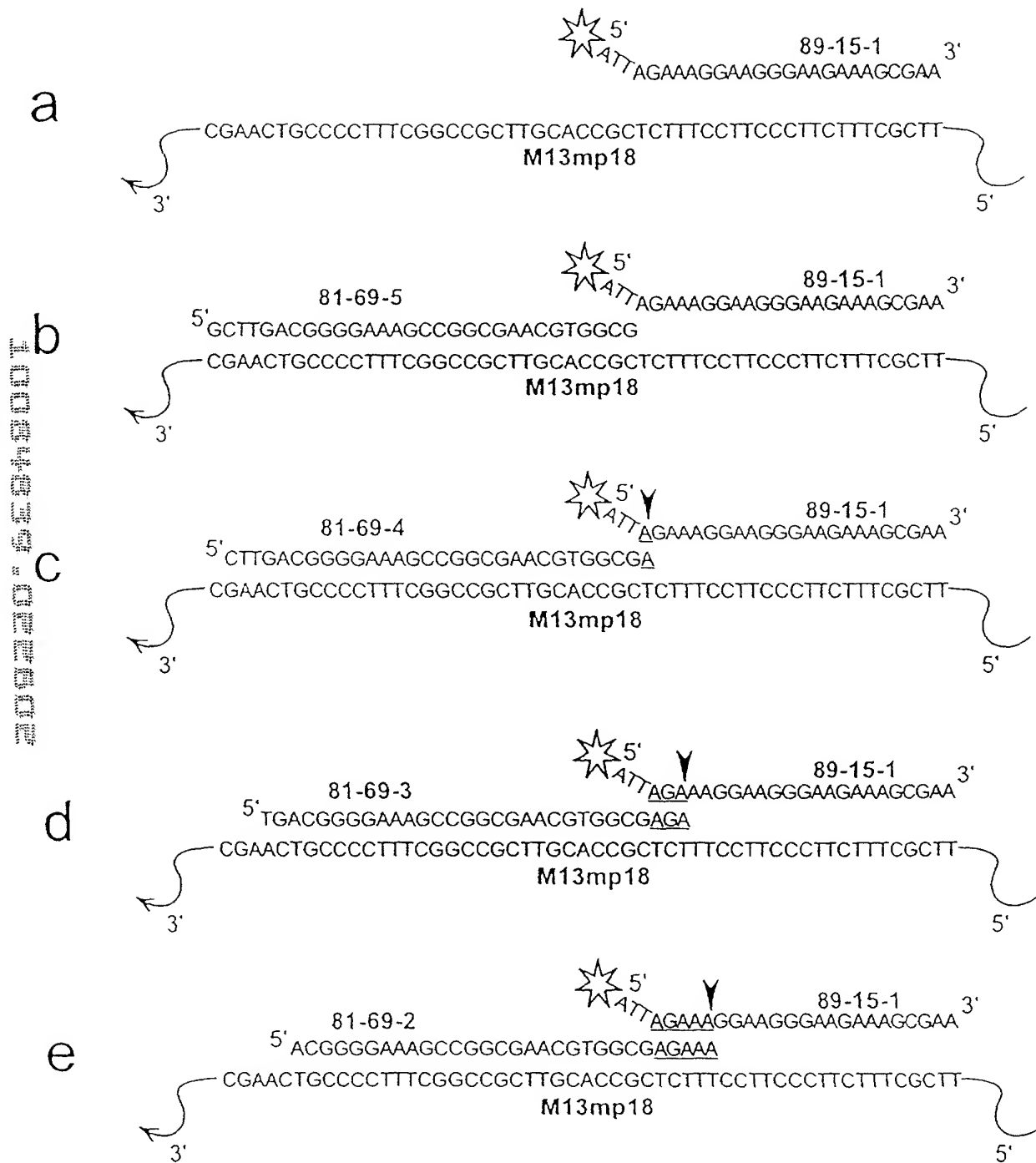


FIGURE 27

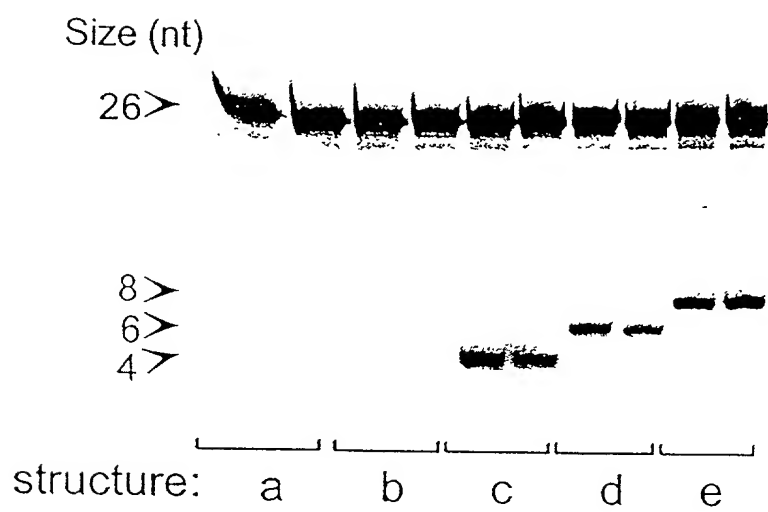
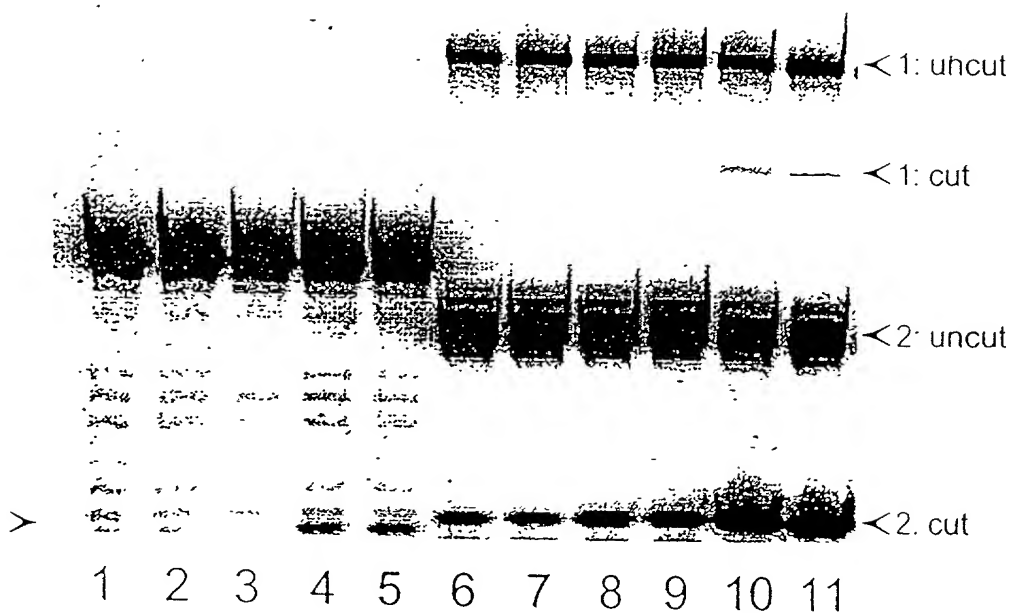


FIGURE 28

a



b

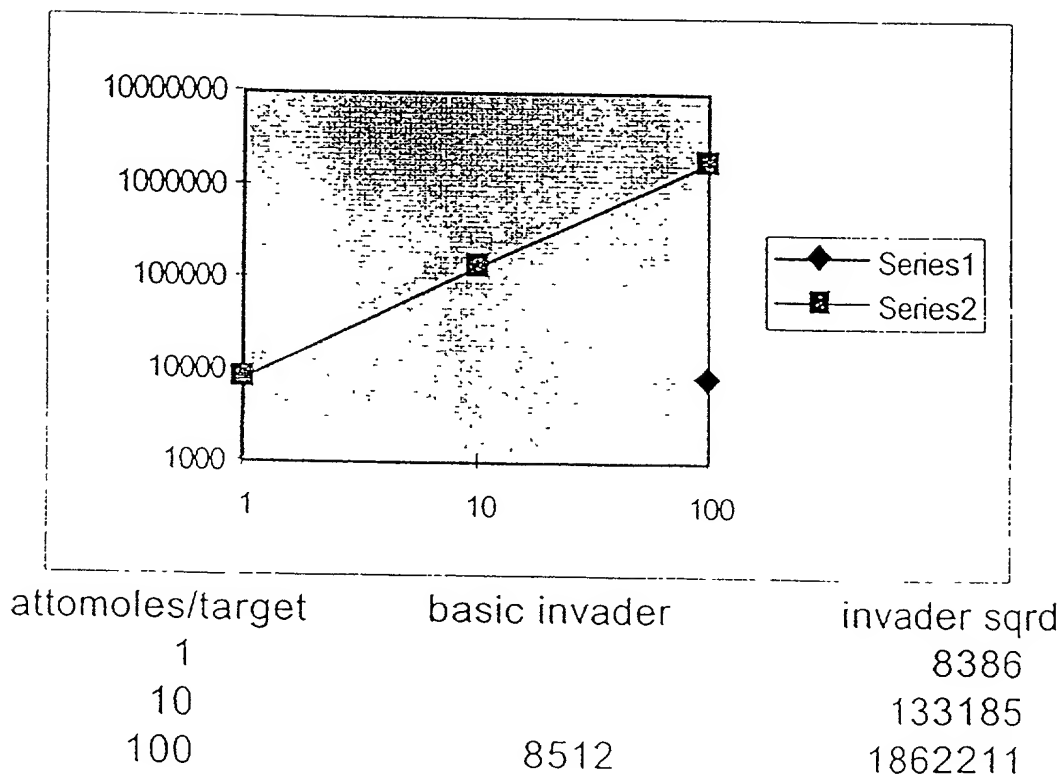


FIGURE 29

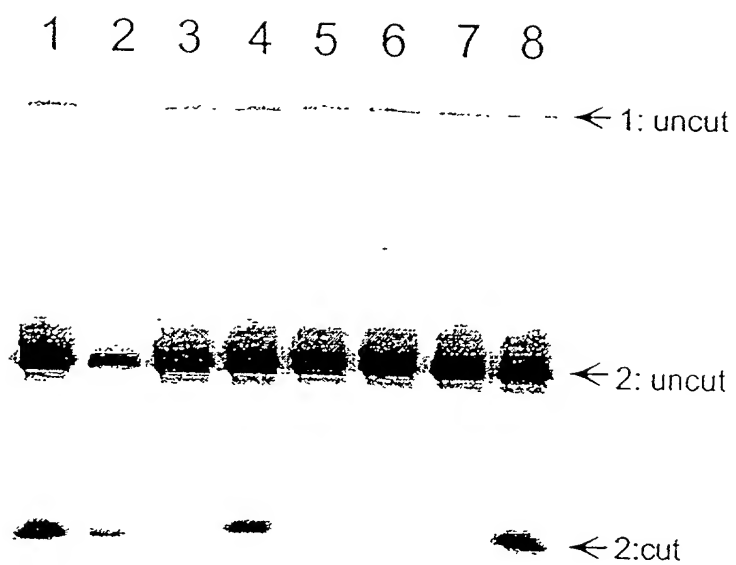


FIGURE 30

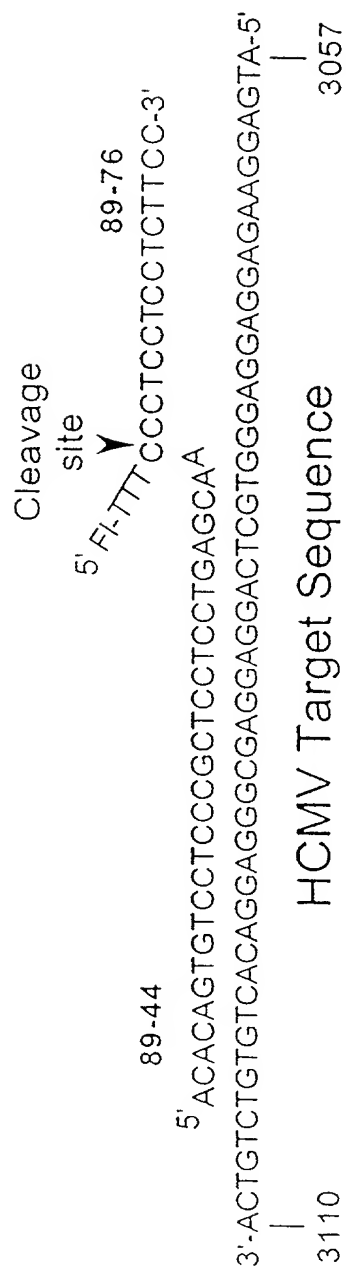


FIGURE 31

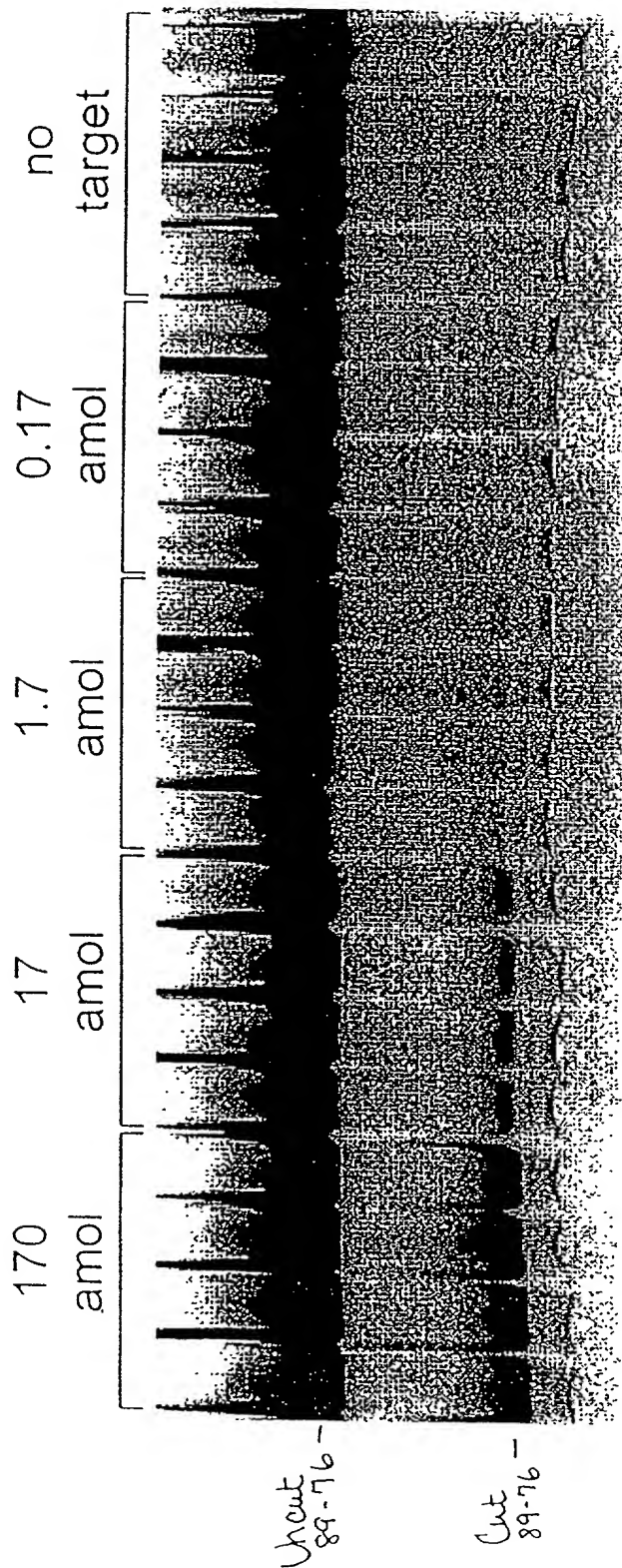
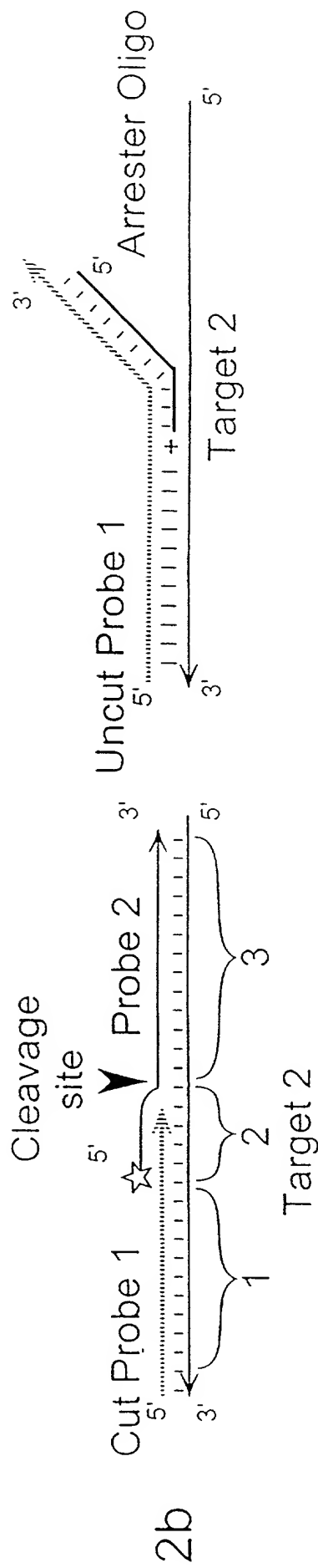
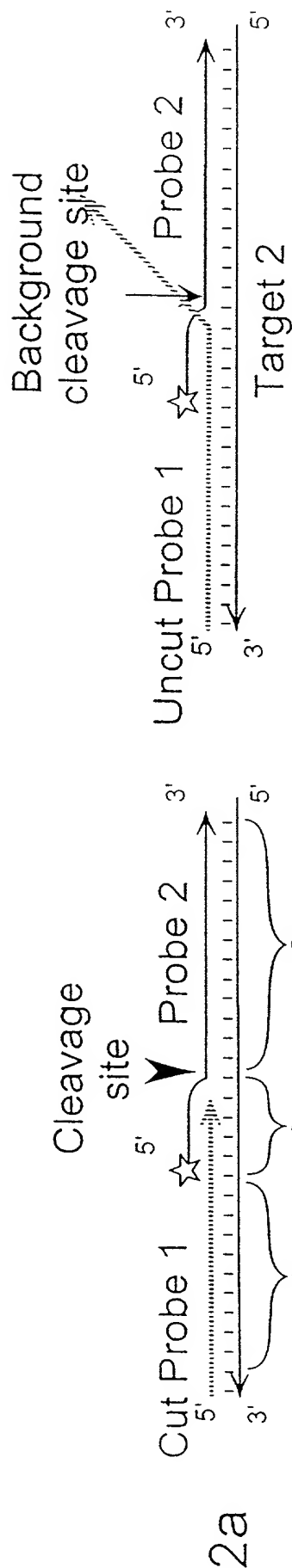
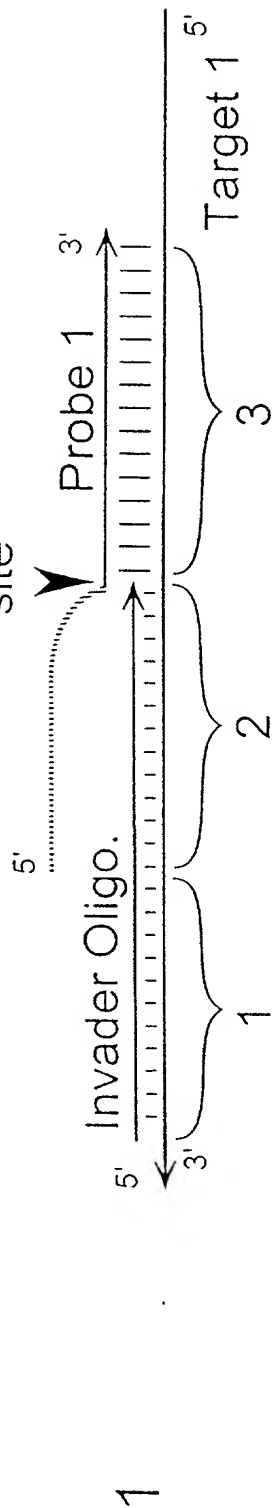
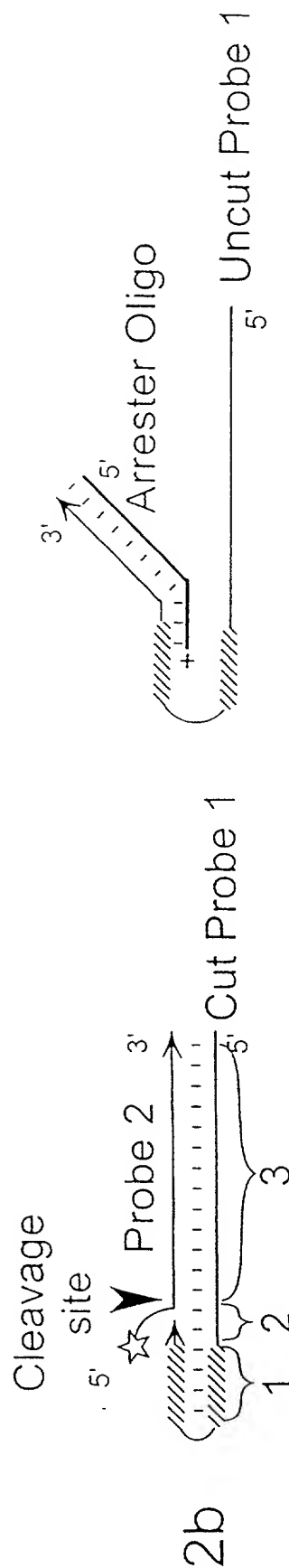
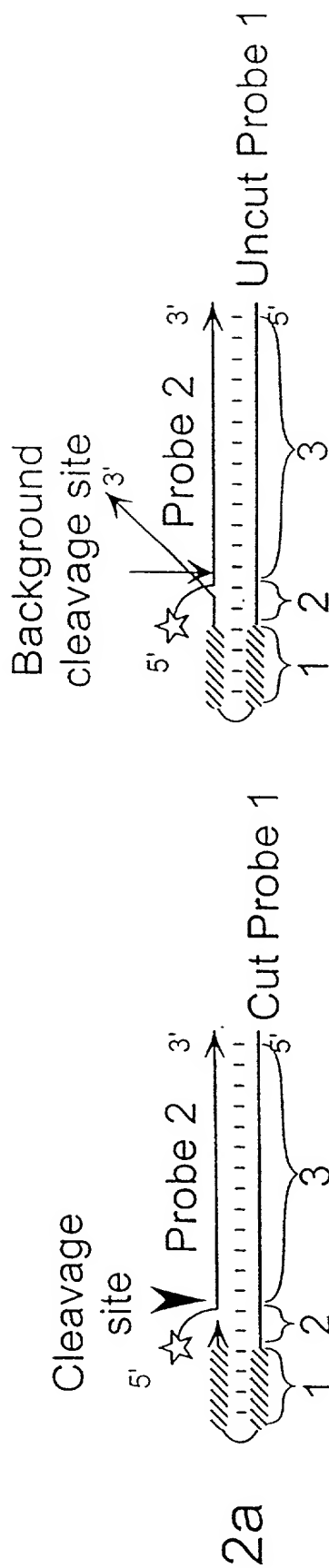
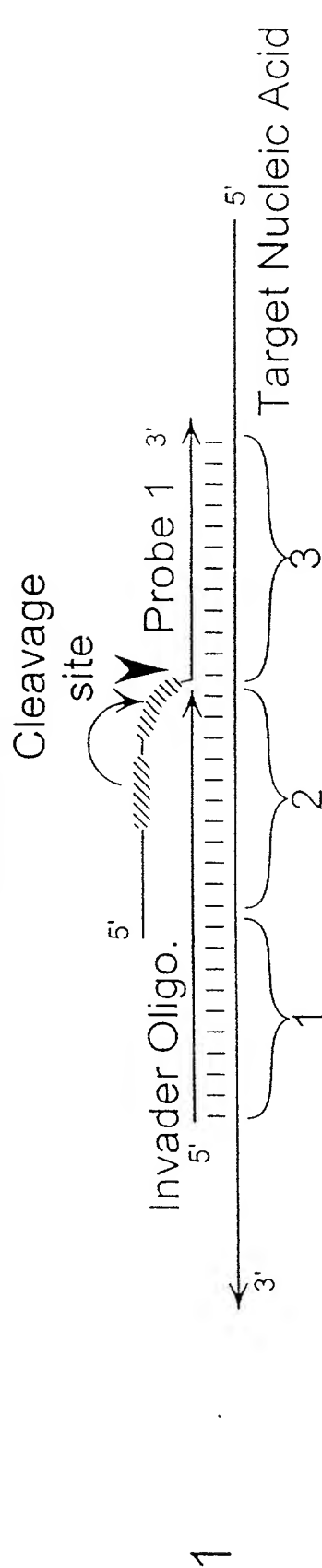


FIGURE 32
Cleavage site



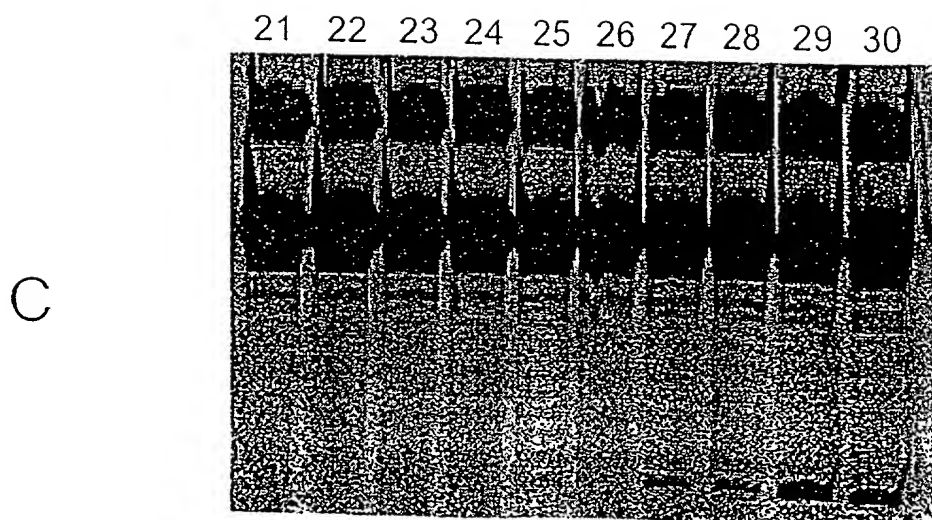
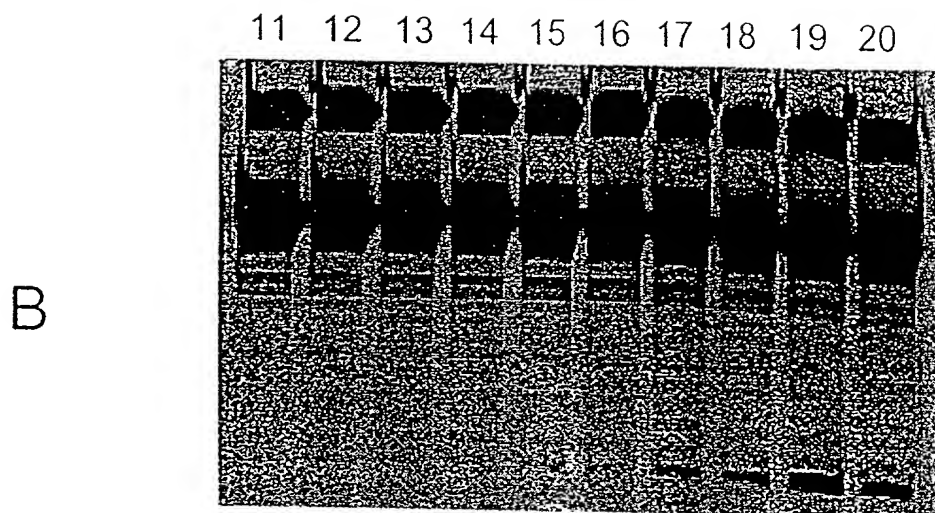
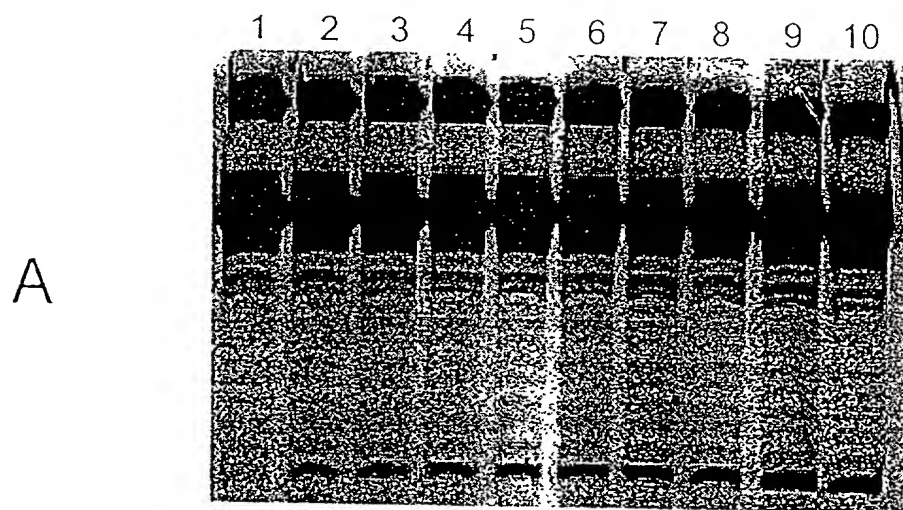
4/9

FIGURE 33



45/

FIGURE 34



209220" 6E240001

FIGURE 35A

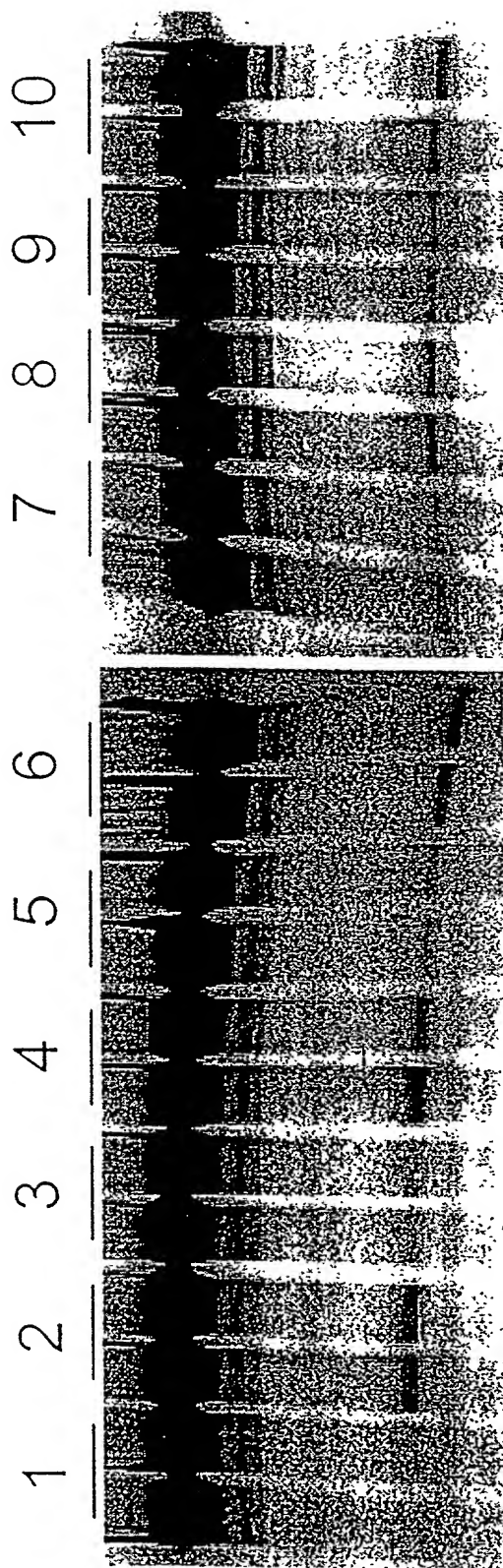


FIGURE 35B

1 2 3 4 5 6 7 8 9 10

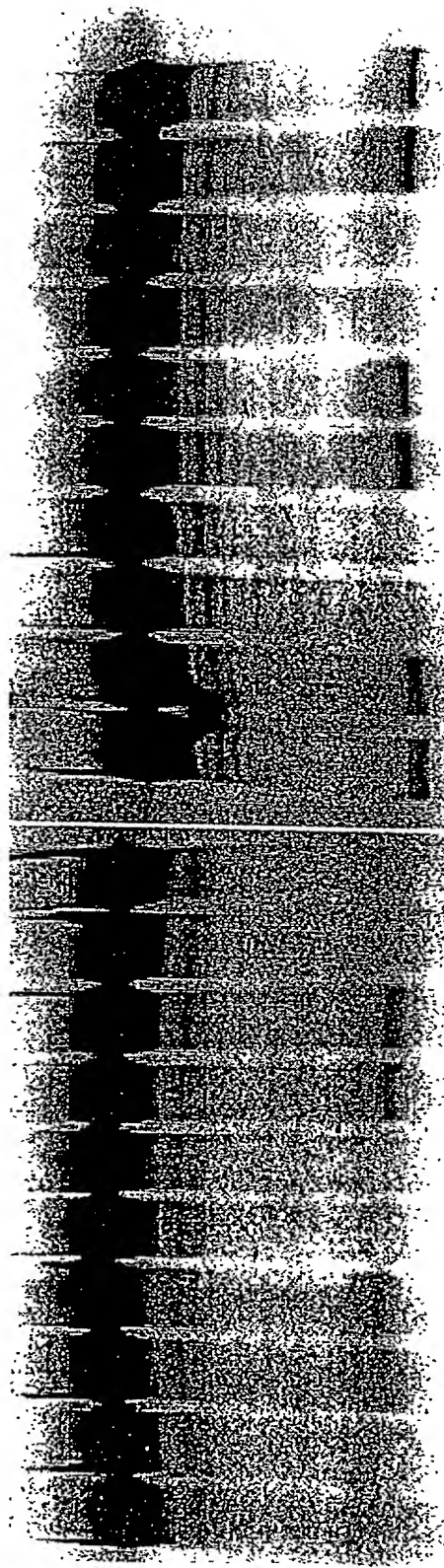


FIGURE 35C

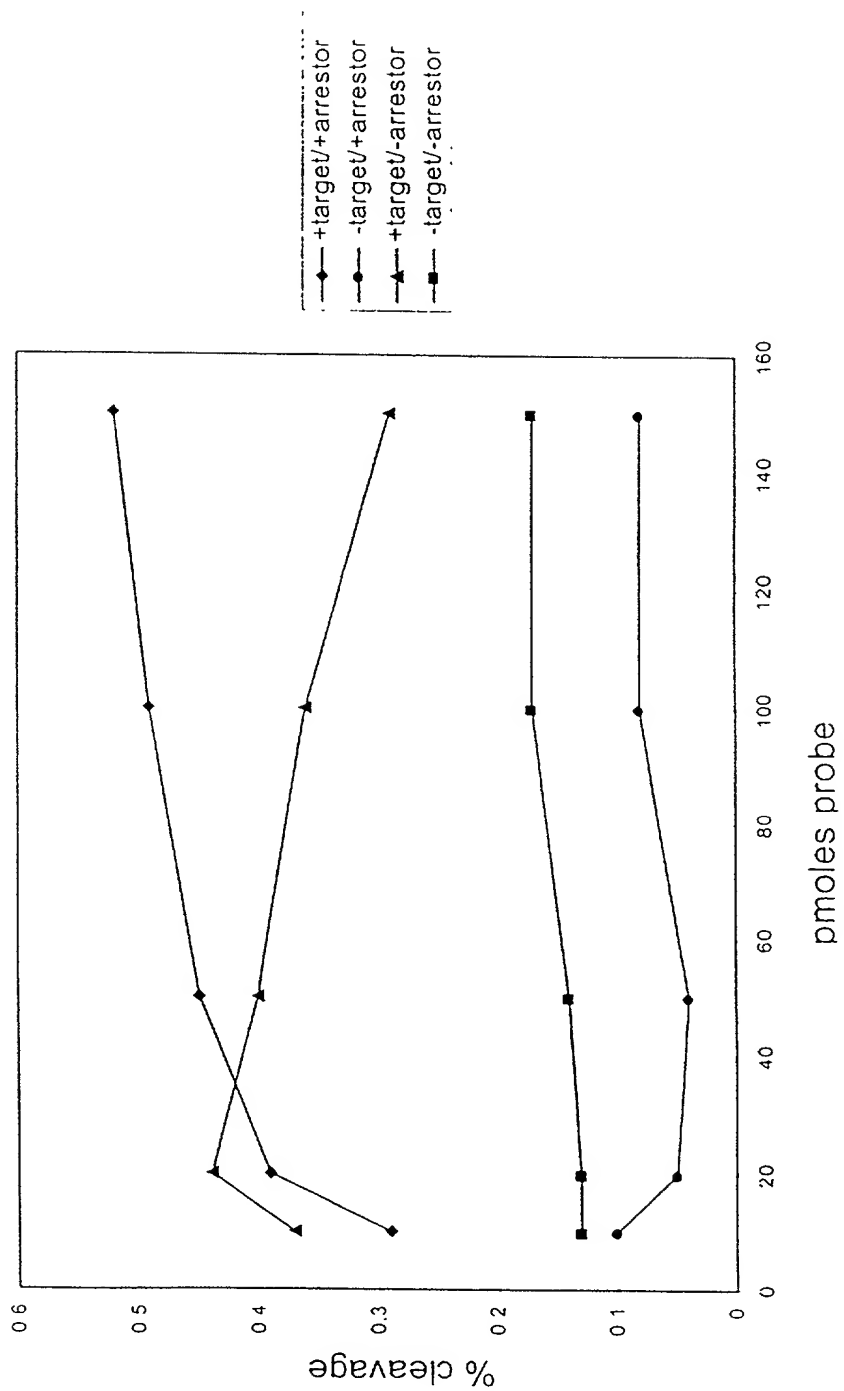


FIGURE 36A

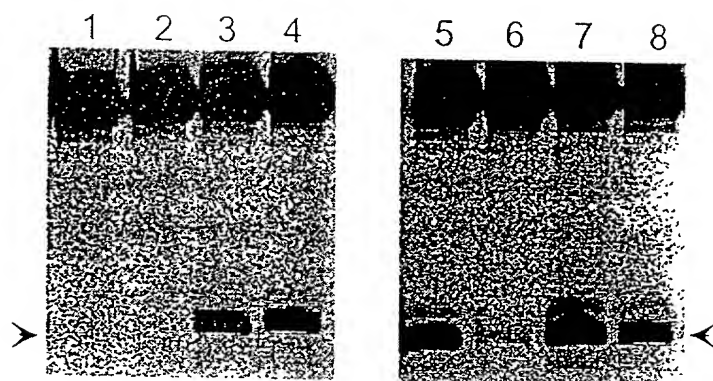
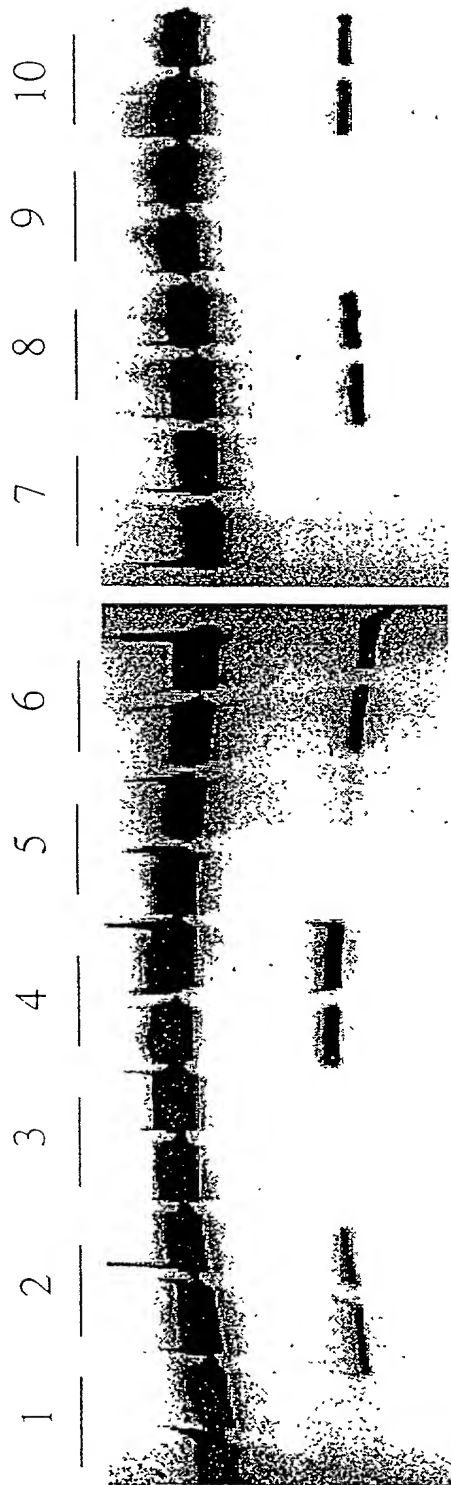


FIGURE 37B "CE-243001"



2009220" 6E84900T

FIGURE 36B

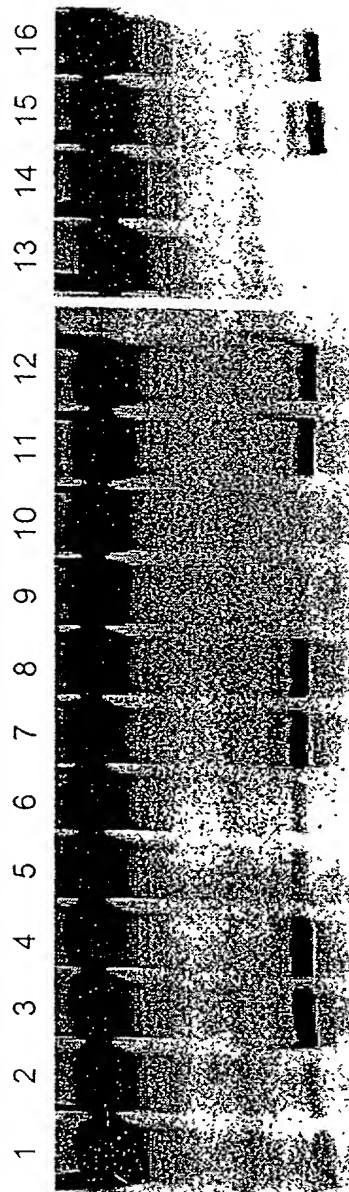


FIGURE 37A

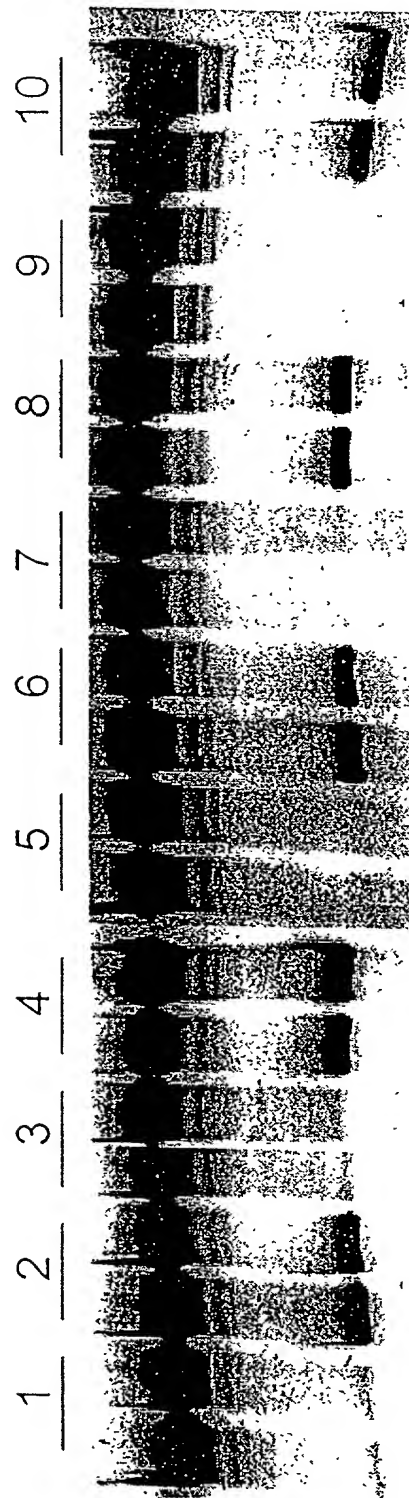
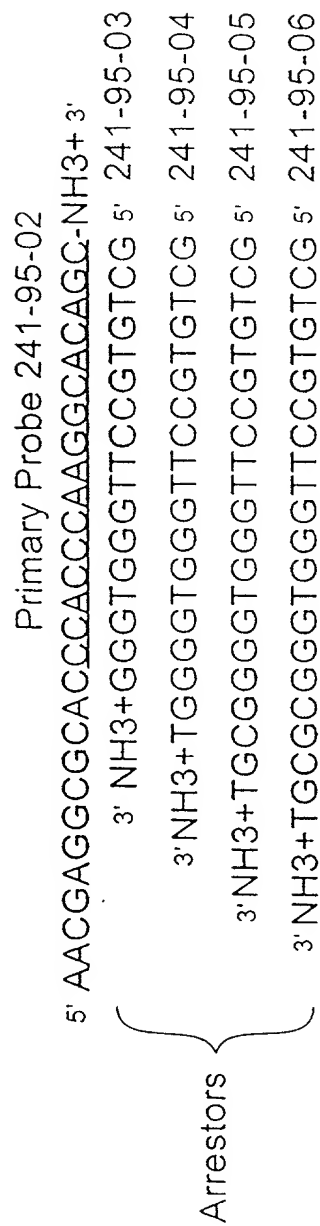


FIGURE 37C



209220" SESTH00T

FIGURE 38

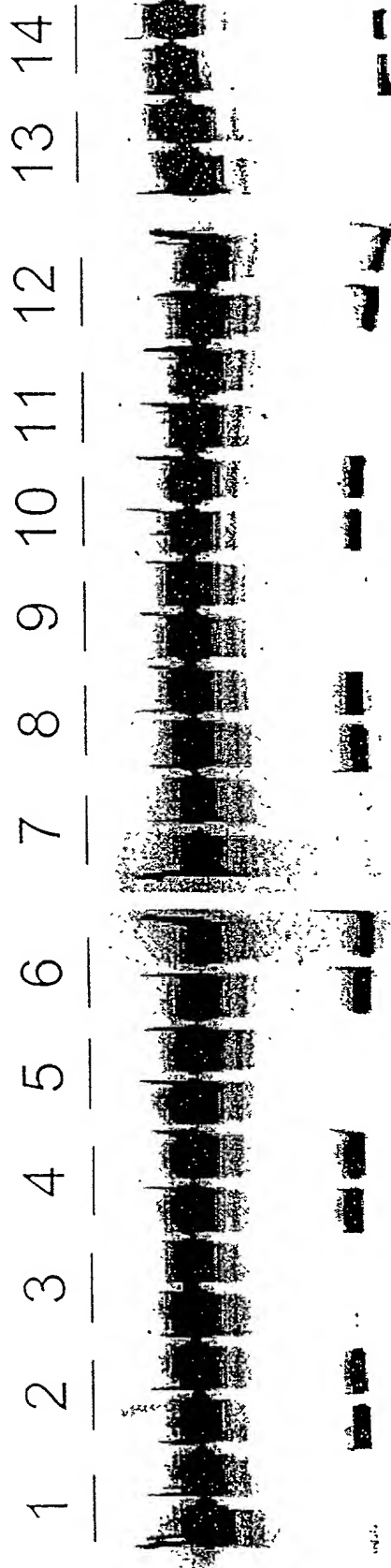


Figure 39

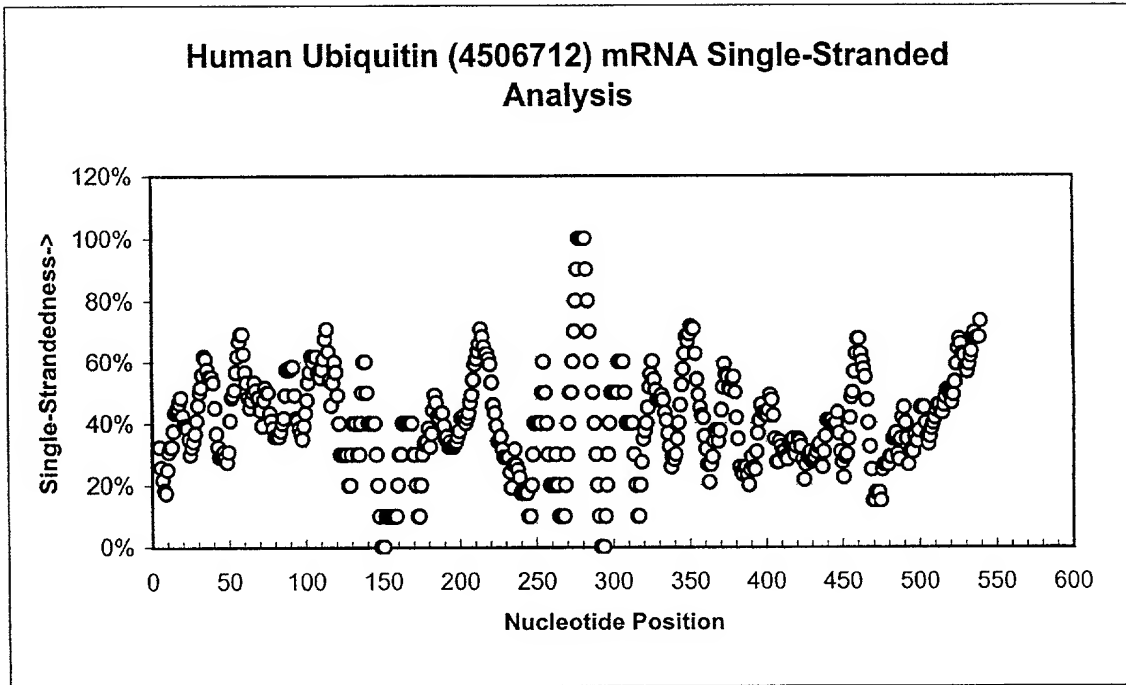


FIGURE 41

hUbiquitin	
Primary probe	5' -CGC CGA GAT CAC CTT TAC ATT TTC TAT CGT NH2-3' (SEQ ID NO:169)
INVADER oligonucleotide	5' -CCT TCC TTA TCC TGG ATC TTG GCA -3' (SEQ ID NO:170)
ARRESTOR oligonucleotide	5'-ACG ATA GAA AAT GTA AAG GTG ATC-3' (SEQ ID NO:171)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3' (SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3' (SEQ ID NO:173)
m/r Ubiquitin, mouse (288C, 516C, 744C, 972C), rat (247C, 475C, 703C, 931C)	
Primary probe	5'-CCG CCG AGA TCA CGG ATG TTG TAA TCA GAG A-NH2-3' (SEQ ID NO:174)
INVADER oligonucleotide 1	5'-GTG CAG GGT TGA CTC CTT CTC-3' (SEQ ID NO:175)
INVADER oligonucleotide 2	5'-GTG CAG GGT TGA CTC TTT CTC-3' (SEQ ID NO:176)
INVADER oligonucleotide 3	5'-GTG CAG GGT CGA CTC TTT CTC-3' (SEQ ID NO:177)
ARRESTOR oligonucleotide	5'-TCT CTG ATT ACA ACA TCC GTG ATC T-3' (SEQ ID NO:178)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3' (SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3' (SEQ ID NO:173)
r/m GAPDH, rat (150C), mouse(166C)	
Primary probe	5'-CGC CGA GAT CAC GTA GTT GAG GTC AAT GA-NH2-3' (SEQ ID NO:179)
INVADER oligonucleotide	5'-GAA TCA TAC TGG AAC ATG TAG ACC ATC-3' (SEQ ID NO:180)
ARRESTOR oligonucleotide	5'-TCA TTG ACC TCA ACT ACG TGA TCT-3' (SEQ ID NO:181)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3' (SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3' (SEQ ID NO:173)
hGAPDH, 516C	
Primary probe	5'-CCG CCG AGA TCA CGA TGA TCT TGA GGC T-NH2-3' (SEQ ID NO:182)
INVADER oligonucleotide	5'-TGG TGC AGG AGG CAT TGC TC-3' (SEQ ID NO:183)
ARRESTOR oligonucleotide	5'-CAG CCT CAA GAT TAC CGT GAT CT-3' (SEQ ID NO:184)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3' (SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3' (SEQ ID NO:173)

58-

hTGF-β

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC CAC GGC TC -3'
5'-AGG CGA AAG CCC TCA ATT TCC CA-3'
5'-AAC CAC TGC CGC ACA-3'
5'-GAG CCG TGG AGG AGG CG-3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:185)
(SEQ ID NO:186)
(SEQ ID NO:187)
(SEQ ID NO:188)
(SEQ ID NO:189)
(SEQ ID NO:190)

hMCP-1

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTT CGG AGT TTG GG NH2 -3"
5'-GGG TTG TGG AGT GAG TGT TCA AGT A -3'
NO STACKER
5'-GGG-AA-CTC-CGA-AGG- AGG-CG-3'
5'-FL-CAC-Z28-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:191)
(SEQ ID NO:192)
(SEQ ID NO:193)
(SEQ ID NO:189)
(SEQ ID NO:190)

hTNF-α

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC TCT GAC TGC CA NH2-3'
5'-TTG TCA CTC GGG GTT CGA GAA GAT GAA-3'
5'-GGG CCA GAG GG-3'
5'-AGG CAG TCA GAG AGG CG-3'
5'-FL-CAC-Z28-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:194)
(SEQ ID NO:195)
(SEQ ID NO:196)
(SEQ ID NO:197)
(SEQ ID NO:189)
(SEQ ID NO:190)

hIL-6

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC ATT GAA TTNH2-3'
5'-CCA AAA GTC CAG TGA TTT TCA CCA GGC AAG TA -3'
5'-CAG ATT GGA AGC ATC CAT CT-3'
5'-GAT TCA ATG AGG AGG AGG C-3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:198)
(SEQ ID NO:199)
(SEQ ID NO:200)
(SEQ ID NO:201)
(SEQ ID NO:189)
(SEQ ID NO:190)

hIL-1 β

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CAT CTG TTT AGG NH2-3'
5'-CAG GTC CTG GAA GGA GCA CTT A-3'
5'-GCC ATC AGC TTC TTT GTT CTT GTC ATC-3'
5'-GCC CTA AAC AGA TGG AGG CG-3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:202)
(SEQ ID NO:203)
(SEQ ID NO:204)
(SEQ ID NO:205)
(SEQ ID NO:189)
(SEQ ID NO:190)

hIL-2

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC CAG TTG TAG NH2 -3'
5'-AAA ATC ATC TGT AAA TCC AGC AGT AAA TGA -3'
5'-CTG TGT TTT CTT TGT AGA AC -3'
5'-CTA CAA CTG GAG GAG GC -3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:206)
(SEQ ID NO:207)
(SEQ ID NO:208)
(SEQ ID NO:209)
(SEQ ID NO:189)
(SEQ ID NO:190)

hIL-8

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC TCA GTT CT-NH2-3'
5'-GTG TGG TCC ACT CTC AAT CAA -3'
5'-TTG ATA AAT TTG GGG TGG AAA GGT TTG GA-3'
5'-AGA ACT GAG AGG AGG CG-3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:210)
(SEQ ID NO:211)
(SEQ ID NO:619)
(SEQ ID NO:620)
(SEQ ID NO:189)
(SEQ ID NO:190)

hIL-10

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CAA ACT CAC TCA T-NH2-3'
5'-GTC ATG TAG GCT TCT ATG TAG TTG ATG AAG ATG TA-3'
5'-GGC TTT GTA GAT GCC TTT CTC TTG GA-3'
5'-ATG AGT GAG TTT GGT GCG-3'
5'-FL-CAC (Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:621)
(SEQ ID NO:622)
(SEQ ID NO:623)
(SEQ ID NO:624)
(SEQ ID NO:189)
(SEQ ID NO:625)

hIL-4

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CTT GGA GGC A-NH2-3'
5'-AAG GTT TCC TTC TCA GTT GTG TTA-3'
5'-GCA AAG ATG TCT GTT ACG GTC AAC TC-3'
5'-TGC CTC CAA GGT GCG C-3'
5'-FL-CAC (Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

hIFN-γ

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CTT CAA AAT GCC TAA-NH2-3'
5'-TGT CAC TCT CCT CTT TCC AAT TA-3'
5'-GAA AAG AGT TCC ATT ATC CGC TAC ATC TG-3'
5'-TTA GGC ATT TTG AAG GTG CGC-3'
5'-FL-CAC (Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

hCYP 1A2, 1193G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CGT TGT GTC CC-NH2-3'
5'-**GGG ATG** TAG AAG CCA TTC AGA-3'
5'-TTG TTG TGC TGT GGG GGA TG-3'
5'-**GGG ACA CAA CGG TGC GC-3'**
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:634)
(SEQ ID NO:635)
(SEQ ID NO:636)
(SEQ ID NO:637)
(SEQ ID NO:189)
(SEQ ID NO:625)

hCYP 2B6, 343G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'- CCG TCA CGC CTC CAC CAT ATC CC-NH2-3'
5'-CCA GCG GTT TCC ATT GGC AAA GAT CAA-3'
5'-**CGG AAG AAT GGG TCG ACC ATG-3'**
5'-**GGG ATA TGG TGG AGG CG-3'**
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:638)
(SEQ ID NO:639)
(SEQ ID NO:640)
(SEQ ID NO:641)
(SEQ ID NO:189)
(SEQ ID NO:190)

hCYP 2C19, 223G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CGT TCC AGG C-NH2-3'
5'-CAT ATC CAT GCA GCA CCA CCA TGA-3'
5'-CAA AAT ACA GAG TGA ACA CAG GGC C-3'
5'-**GCC TGG AAC GGT GCG C-3'**
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:642)
(SEQ ID NO:643)
(SEQ ID NO:644)
(SEQ ID NO:645)
(SEQ ID NO:189)
(SEQ ID NO:625)

hCYP 2C9, 1554T

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC ATG GAT AAT GCC C-NH2-3'
5'-CAG GTG AGA AAA GGC ATT ACA GAT AGT GAA AGC-3'
5'-CAG AGG AAA GAG AGC TGC AGG G-3'
5'-**GGG CAT TAT CCA TGA GGC G-3'**
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:646)
(SEQ ID NO:647)
(SEQ ID NO:648)
(SEQ ID NO:649)
(SEQ ID NO:189)
(SEQ ID NO:190)

hCYP 2D6, 1316G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CCT GCT GAG AAA-NH2-3'
5'-CCC GAG GCA TGC ACG GCG GA-3'
5'-GGC AGG AAG GCC TCC-3'
5'-TTT CTC AGC AGG GAG GCG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:650)
(SEQ ID NO:651)
(SEQ ID NO:652)
(SEQ ID NO:653)
(SEQ ID NO:189)
(SEQ ID NO:190)

hCYP 3A4, 309C

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC GCC CCA CA-NH2-3'
5'-CAG CAC AGG CTG TTG ACC ATC ATA AAA C-3'
5'-CTT TTC CAT ACT TTT TAT GAC ATT C-3'
5'-TGT GGG GCG AGG CG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:654)
(SEQ ID NO:655)
(SEQ ID NO:656)
(SEQ ID NO:657)
(SEQ ID NO:189)
(SEQ ID NO:190)

hCYP 3A5 v2, 323T

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC AGT TGA CCT TC-NH2-3'
5'-GTG ATG GCC AGC ACA GGG C-3'
5'-ATA CGT TCC CCA CAT TTT TC-3'
5'-TGA AGG TCA ACT GTG CGC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:658)
(SEQ ID NO:659)
(SEQ ID NO:660)
(SEQ ID NO:661)
(SEQ ID NO:189)
(SEQ ID NO:625)

hCYP 3A7, 231C

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC GTC ATA AAT ACC CC-NH2-3'
5'-GCC AGC ATA GGC TGT TGA CAC-3'
5'-AGA CTT TTC TAT ACT TTT TAT AAC ATT C-3'
5'-GGG GTA TTT ATG ACG TGC GC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:662)
(SEQ ID NO:663)
(SEQ ID NO:664)
(SEQ ID NO:665)
(SEQ ID NO:189)
(SEQ ID NO:625)

h/rCYP 1A1 (human: 937, rat 863G)

Primary probe
INVADER oligonucleotide (h)
INVADER oligonucleotide (r)
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTG TCT GTG AT-NH2-3'
5'-TCC TGA CAG TGC TCA ATC AGG A-3'
5'-TCC TGA CAA TGC TCA ATG AGG A-3'
5'-GTC CCG GAT GTG GCC C-3'
5'-ATC ACA GAC AGG AGG CG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:666)
(SEQ ID NO:667)
(SEQ ID NO:668)
(SEQ ID NO:669)
(SEQ ID NO:670)
(SEQ ID NO:189)
(SEQ ID NO:190)

h/rCYP 1A2 (813C/819C)

Primary probe
INVADER oligonucleotide (h)
INVADER oligonucleotide (r)
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC GGA CTG TTT TCT GC-NH2-3'
5'-CTT GTC AAA GTC CTG ATA GTG CTC CTC-3'
5'-CTT GTT GAA GTC TTG ATA GTG TTC CTC-3'
5'-GCA GAA AAC AGT CCG TGC GC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:671)
(SEQ ID NO:672)
(SEQ ID NO:673)
(SEQ ID NO:674)
(SEQ ID NO:189)
(SEQ ID NO:625)

rCYP 2B1, 1017T

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC ACT GCG GTC AT-NH2-3'
5'-GTG GAT AAC TGC ATC AGT GTA TGG CAT TTT C-3'
5'-CAA GGG TTG GTA GCC TGT GTG AGC C-3'
5'-ATG ACC GCA GTG AGG CG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:675)
(SEQ ID NO:676)
(SEQ ID NO:677)
(SEQ ID NO:678)
(SEQ ID NO:189)
(SEQ ID NO:190)

rCYP 2B2, 162T

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC AGA GCC AAT CAC-NH2-3'
5'-CGA TCA TCA AGG GAT GGT GGC CTG TGC-3'
5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G-3'
5'-GTG ATT GGC TCT GAG GCG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:679)
(SEQ ID NO:680)
(SEQ ID NO:681)
(SEQ ID NO:682)
(SEQ ID NO:189)
(SEQ ID NO:190)

rCYP 2E1, 969G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC AAT TTC TG-NH2-3'
5'-CCC TGT CAA TTT CTT CAT GAA GTT TA-3'
5'-GGT ATT TCA TGA GGA TCA GGA GC-3'
5'-CAG AAA TTG AAG AGG AGG CG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:683)
(SEQ ID NO:684)
(SEQ ID NO:685)
(SEQ ID NO:686)
(SEQ ID NO:189)
(SEQ ID NO:190)

rCYP 3A1, 164G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CGG GTC CCA-NH2-3'
5'-TCC CCT GTT TCT TGA AAA GTC CAT GTG TGA-3'
5'-AAT CCG TAG AGG AGC ACC AGG-3'
5'-TGG GAC CCG GTG CGC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:687)
(SEQ ID NO:688)
(SEQ ID NO:689)
(SEQ ID NO:690)
(SEQ ID NO:189)
(SEQ ID NO:625)

rCYP 3A2, 1091G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC GGC AGG-NH2-3'
5'-CAC AAT ATC GTA GGT AGG AGG TGC CTT AA-3'
5'-GCC CCA TCG ATC TCC TCC-3'
5'-CCT GCC GAG GAG GCG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:691)
(SEQ ID NO:692)
(SEQ ID NO:693)
(SEQ ID NO:694)
(SEQ ID NO:189)
(SEQ ID NO:190)

rCYP 4A1, 296A

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC TAG GCT TTG CT-NH2-3'
5'-TTC ATG TAG TCA GGG TCA TAG ACA ATT AAG A-3'
5'-TCC CCA GAA CCA TCG AGG AAA GG-3'
5'-AGC AAA GCC TAG TGC GC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:695)
(SEQ ID NO:696)
(SEQ ID NO:697)
(SEQ ID NO:698)
(SEQ ID NO:189)
(SEQ ID NO:625)

rCYP 4A2

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC AGA AGG CCC CTT-NH2-3'
5'-CCT TGA ACA GCA CCA GAA ATA GAC TGA GCA C-3'
5'-GGA AGA ACC CAG AGA CAC CAT CC-3'
5'-AAG GGG CCT TCT GTG CGC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:699)
(SEQ ID NO:700)
(SEQ ID NO:701)
(SEQ ID NO:702)
(SEQ ID NO:189)
(SEQ ID NO:625)

rCYP 4A3, 1235C

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC GTT GTG ATA CCT T-NH2-3'
5'-GAT GAA GGC CAT AAA TTA AAA TTG TGC-3'
5'-TGG GTA TGG AAC GTC C-3'
5'-AAG GTA TCA CAA CGT GCG C-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:703)
(SEQ ID NO:704)
(SEQ ID NO:705)
(SEQ ID NO:706)
(SEQ ID NO:189)
(SEQ ID NO:625)

Figure 42

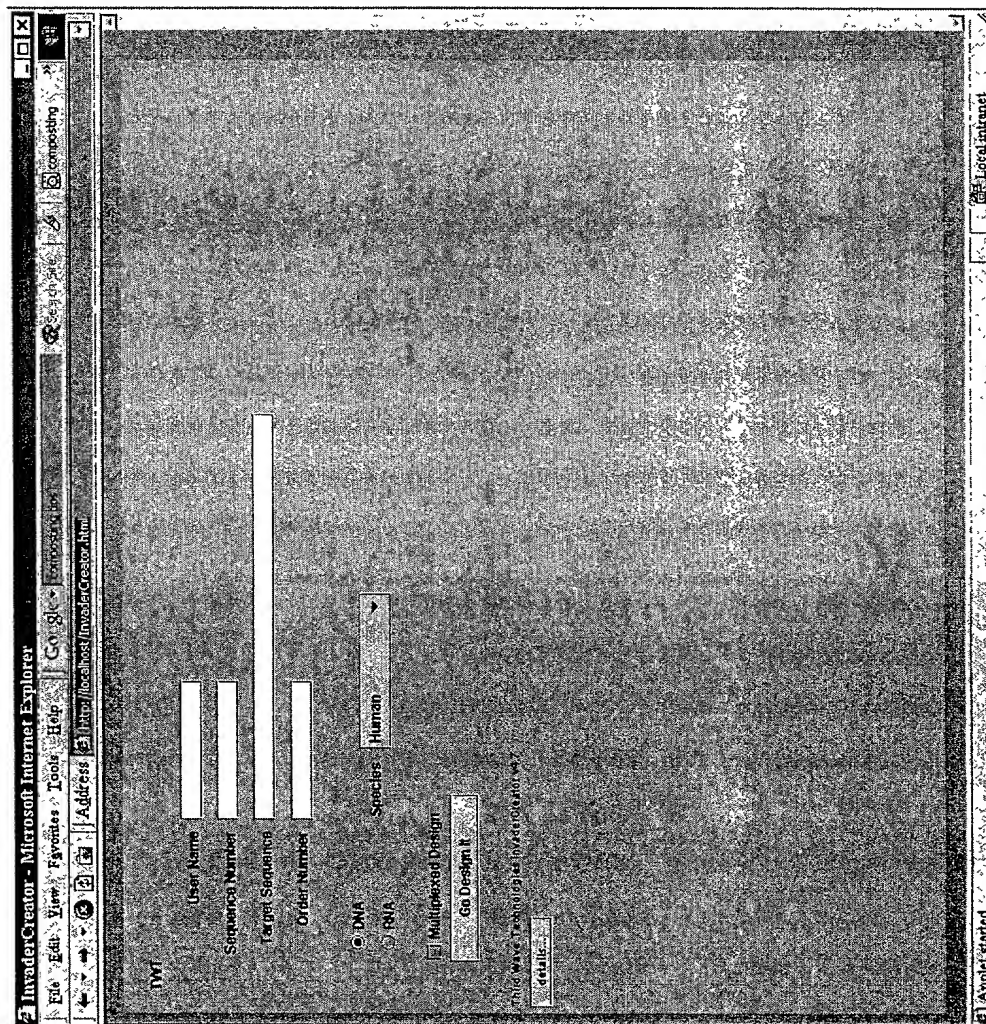
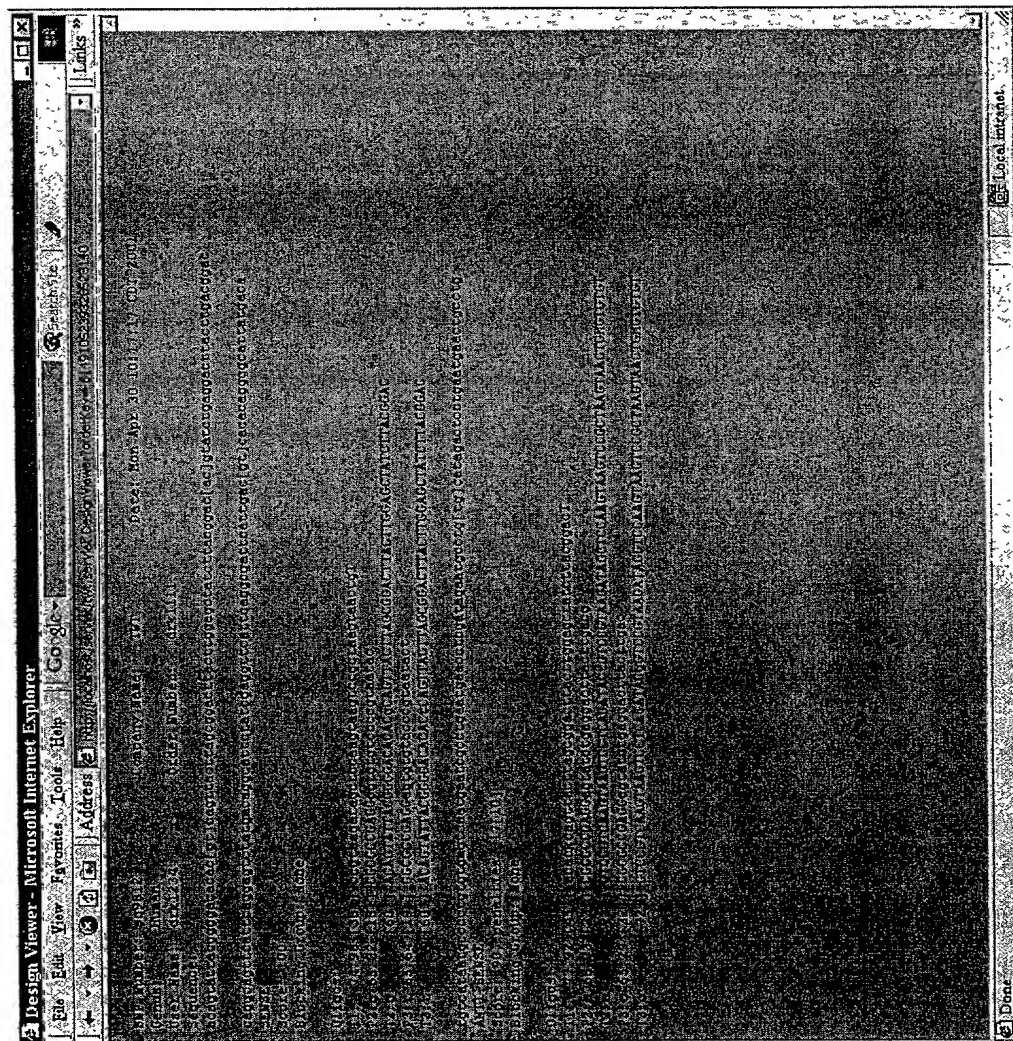


Figure 46



71!

FIGURE 47

Oligo sequence descriptions: 5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications defined in ()

Oligo Type	Oligo Sequence (5' to 3')	Modification	SEQ ID NO
hTNF-α			
probe	cgc ccg aga tca ctc tga ctg cct NH2	3' Amine	709
invader	ttg tca ctc ggg gtt cga gaa gat gaa		710
stacker	<u>ggg cca gag ggc tga tta g</u>	all 2'Ome bases	711
stacker	<u>ggg cca gag ggc tga tta</u>	all 2'Ome bases	712
stacker	<u>ggg cca gag ggc tg at</u>	all 2'Ome bases	713
stacker	<u>ggg cca gag ggc t</u>	all 2'Ome bases	714
stacker	<u>ggg cca gag gg</u>	all 2'Ome bases	715
arrestor	<u>agg cag tca gag tga tc</u>	all 2'Ome bases	716
arrestor	<u>agg cag tca gag tga tct c</u>	all 2'Ome bases	717
SRT	cggaaagacagcttggtgatctcgccgNH2		718
FRET probe	Fcaac(Cy3)gcttctccg	3' Amine	719
probe	cgc tca cgc ctc tct gac tgc ct NH2		720
invader	ttg tca ctc ggg gtt cga gaa gat gaa		721
stacker	<u>ggg cca gag ggc tga tta g</u>	all 2'Ome bases	722
arrestor	<u>agg cag tca gag agg cg</u>	all 2'Ome bases	723
SRT	cggaaagacagcttggtgatctcgccgNH2	3'base 2'Ome, 3'Amine	724
FRET probe	Fcaac(Cy3)gcttctccg		725
probe	cgc tca cgc ctc tct gac tgc ctg gNH2		726
invader	ttg tca ctc ggg gtt cga gaa gat gaa		727
arrestor	<u>cca ggc agt cag aga ggc g</u>	all 2'Ome bases	728
SRT	cggaaagacagcttggtgatctcgccgNH2		729
FRET probe	Fcaac(Cy3)gcttctccg	3'base 2'Ome, 3'Amine	730
probe	cgc ccg aga tca ctc tga ctg cc NH2		731
invader	ttg tca ctc ggg gtt cga gaa gat gaa		732
stacker	<u>tgg gcc aga ggg ctg att a</u>	all 2'Ome bases	733
arrestor	<u>agg cag tca gag tga tc</u>	all 2'Ome bases	734
SRT	cggaaagacagcttggtgatctcgccgNH2		735
FRET probe	Fcaac(Cy3)gcttctccg	3' Amine	736
probe	cgc ccg aga tca ctg atc tga ctg NH2		737
invader	ctt gtc act cgg ggt tgg aga aga c	3' Amine	738

stacker ccg ggg cca gag ggc tga tt 739
 arrestor cag tca gat cag tga tc 740
 SRT cggagaagcagttggtgatctcgccgNH2 741
 FRET probe Fcaac(Cy3)gcttcctccg 742

probe ccg tca cgc ctc tct gac tgc ca NH2 743
 probe ccg tca cgc ctc tct gac tgc cg NH2 744
 probe ccg tca cgc ctc tct gac ggc ct NH2 745
 probe ccg tca cgc ctc tct gac agc ct NH2 746
 invader ttg tca ctc ggg gtt cga gaa gat gaa 747

stacker ggg cca gag gg 748
 arrestor agg cag tca gag agg cg 749
 arrestor agg ccg tca gag agg cg 750
 arrestor agg ctg tca gag agg cg 751
 SRT ccaggaagcaagtgaggcggtgacggg 752
 FRET probe Fcaac(Z21)tgcttcctccg 753

probe ccg aga tca ctc tga tgc ctg gg NH2 754
 invader ctt gtc act cgg ggt tgc aga aga tga a 755
 arrestor ccc agg cag tca gag tga tcNH2 756
 SRT cggagaagcagttggtgatctcgccgNH2 757
 FRET probe Fcaac(Cy3)gcttcctccg 758

hIL-1 β probe ccg tca cgc ctc cat ctg ttg agg g NH2 759
 invader cag gtc ctg gaa gga gca ctt a 760
 stacker cca tca gct tct ttg ttc ttg tca tc 761
 arrestor gcc cta aac aga tgg agg cg 762
 SRT cggagaagcagttgaggcggtgacggNH2 763
 FRET probe Fcaac(Cy3)gcttcctccg 764

probe ccg tca cgc ctc cat ctg ttg agg gc NH2 765
 invader cag gtc ctg gaa gga gca ctt a 766
 stacker cat cag ctt ctt tct tct tct cat cc 767
 arrestor gcc cta aac aga tgg agg cg 768
 SRT cggagaagcagttgaggcggtgacggNH2 769
 FRET probe Fcaac(Cy3)gcttcctccg 770

probe ccg tca cgc ctc cat ctg ttg agg NH2 771

invader	cag gtc ctg gaa gga gca ctt a	772
stacker	<u>gcc atc agc ttc ttt gtt ctt gtc atc</u>	773
SRT	cggagaagcagttggagcgtagcggtNH2	774
FRET probe	Fcaac(Cy3)gcttctccg	775
probe	ccg tca cgc ctc cca tca gct tcNH2	776
invader	gag cac ttc atc tgt tia ggg a	777
stacker	<u>ttt gtt ctt gtc atc ctc att gcc ac</u>	778
arrestor	<u>gaa gct gat ggg agg cg</u>	779
SRT	cggagaagcagttggagcgtagcggtNH2	780
FRET probe	Fcaac(Cy3)gcttctccg	781
probe	ccgcgagatcactcctctgtttaggccNH2	782
probe	ccgcgagatcactcctctgtttaggccNH2	783
invader	caggtctggaaggagcacta	784
arrestor	<u>ggccctaaacagatgagtcNH2</u>	785
SRT	cggagaagcagttggtagctctcgccgNH2	786
FRET probe	Fcaac(Cy3)gcttctccg	787

hcFOS		788
probe	ccg tca cgc ctc cag gtt ggc NH2	789
invader	gct tga ccc agg gag gg	790
arrestor	<u>gcc aag gtc ctg gag ggc</u>	791
SRT	cggagaagcagttggagcgtagcggtNH2	792
FRET probe	Fcaac(Cy3)gcttctccg	
probe	ccg tca cgc ctc cag gtt gg NH2	793
invader	gct tga ccc agg gag gg	794
stacker	<u>caa tct cgg tct gca aag cag ac</u>	795
arrestor	<u>gcc aag gtc ctg gag ggc</u>	796
SRT	cggagaagcagttggagcgtagcggtNH2	797
FRET probe	Fcaac(Cy3)gcttctccg	798
probe	ccg tca cgc ctc tca gca ggt tgg NH2	799
invader	act cta gtt ttt cct tct cct a	800
stacker	<u>caa tct cgg tct gca aag cag ac</u>	801
arrestor	<u>cca acc tgc tga gag ggc</u>	802
SRT	cggagaagcagttggagcgtagcggtNH2	803
FRET probe	Fcaac(Cy3)gcttctccg	804

hIL-6

probe ccc ccc aga tca ctc tcc tca ttg aat cct NH2 805
 probe ccc ccc aga tca ctc tcc tca ttg aat ccNH2 806
 invader cca aaa gtc cag tga tga ttt tca cca ggc aag a 807
 arrestor **agg att caa tga gga aga gtc atc tNH2** 808
 SRT cggaggagcaggttgatctcggcgNH2 809
 FRET probe Fcaac(Cy3)gcttctccg 810

3' Amine
 3' Amine

all 2'Ome bases, 3' Amine
 3' 2 last base **2' Ome**, 3' Amine

probe

invader ccc tca cgc ctc ctc att gaaNH2 811
 stacker cca gtc atg att ttc acc agg caa gta 812
 arrestor **tcc aga ttg gaa gca tcc atc t** 813
 SRT **ttc aat gag gag gag gc** 814
 FRET probe cggaggagcaggttgaggcggtgacggtNH2 815
 Fcaac(Cy3)gcttctccg 816

3' Amine

all 2'Ome bases
all 2'Ome bases
 3'base **2'Ome**, 3'Amine

probe

invader ccc tca cgc ctc ctc att gaaNH2 817
 stacker cca gtc atg att ttc acc agg caa gta 818
 arrestor **atc cag att gga agc atc cat ct** 819
 SRT **ttc aat gag gag gag gc** 820
 FRET probe cggaggagcaggttgaggcggtgacggtNH2 821
 Fcaac(Cy3)gcttctccg 822

3' Amine

all 2'Ome bases
all 2'Ome bases
 3'base **2'Ome**, 3'Amine

probe

probe ccc tca cgc ctc ctc att gaa tNH2 823
 probe ccc tca cgc ctc ctc att gaa taNH2 824
 probe ccc tca cgc ctc ctc att gaa tNH2 825
 invader cca aaa gtc cag tga tga ttt tca cca ggc aag ta 826
 stacker **cagattggaagcatccatct** 827
 arrestor **gattcaatgaggaggaggc** 828
 SRT ccaggaggaggtgaggcggtgacggu 829
 FRET probe Fcaac(Z21)gcttctggtg 830

3' Amine
 3' Amine
 3' Amine

all 2'Ome bases
all 2'Ome bases
 3' 3bases **2'Ome**

hMCP-1

probe ccc tca cgc ctc ctt cgg agt ttg gttNH2 831
 probe ccc tca cgc ctc ctt cgg agt ttg gtt NH2 832
 invader ggg ttg tgg agt gag tgt tca agt a 833
 arrestor **aac cca aac tcc gaa ggc ggc gtc NH2** 834
 SRT cggaggaggaggtgaggcggtgacggtNH2 835

3' Amine
 3' Amine

all 2'Ome bases
 3'base **2'Ome**, 3'Amine

FRET probe	Fcaac(Cy3)gcttcctccg	836
probe	gcc gtc acg cct ctt tgg gtt tgc ttg tc NH2	837
probe	gcc gtc acg cct ctt tgg gtt tgc ttg tNH2	838
invader	tggagtgaagtgtcaagtcctcgaga	839
arrestor	gacaagcaaacccaaagagggcg	840
SRT	cggagaagcagttgagggcgtgacggcNH2	841
FRET probe	Fcaac(Cy3)gcttcctccg	842
probe	cct gtc tgc ctg cct tgc gag ttg ggg	843
probe	cct gtc tgc ctg cct tgc gag ttg gg	844
invader	ggg ttg tgg agt gag tgt tca agt a	845
arrestor	ccc aaa ctc cga agg cag cg	846
SRT	cggaggaagcagttggcagcgagacagNH2	847
SRT	cggaggaagcagttggcagcgagac(Amino dA)ggNH2	848
SRT	cggaggaagcagttggcagcg(Amino dA)gacaggNH2	849
SRT	cggaggaagcagttggc(Amino dA)gcgacagNH2	850
SRT	cggaggaagcagttggcagcg(Amino dA)gac(Amino dA)ggNH2	851
SRT	cggaggaagcagttggc(Amino dA)gcgagac(Amino dA)ggNH2	852
SRT	cggaggaagcagttggc(Amino dA)gcg(Amino dA)gacaggNH2	853
FRET probe	Fcaac(Cy3)gcttcctccg	854
probe	gcc gtc acg cct ctg gga cac ttg ctg cNH2	855
invader	gcc aca atg gtc ttg aag atc aca gct tct ta	856
arrestor	gca gca agt gtc cca gag gcg NH2	857
SRT	cggagaagcagttgagggcgtgacggcNH2	858
FRET probe	Fcaac(Cy3)gcttcctccg	859
probe	cgc tca cgc ctc ctt cgg agt ttg gg NH2	860
invader	ggg ttg tgg agt gag tgt tca agt a	861
arrestor	5'-ggg-aaa-ctc-cga-agg-agg-cg-3'	862
SRT	ccaggagaagcagttgagggcgtgacggg	863
FRET probe	Fcac(Z21)tgctctgtg	864
probe	cgc cga gat cac ctt cgg agt ttg ggNH2	865
invader	ggg ttg tgg agt gag tgt tca agt a	866
arrestor	ccc aaa ctc cga agg tga tc	867
SRT	cggagaagcagttggtgatctcggcgNH2	868
FRET probe	Fcaac(Cy3)gcttcctccg	869

probe	aac gag gcg cac ctt cgg agt ttg gg NH2	870
invader	ggg ttg tgg agt gag tgt tca agt a	871
arrestor	<u>ccc aaa ctc cga agg tgc g</u>	872
SRT	cggaagaagcagttggtgcgcctgttaaNH2	873
FRET probe	Fcaac(Cy3)gcttcctccg	874
probe	cgc tca cgc ctc ctt cgg agt ttg g NH2	875
invader	ggg ttg tgg agt gag tgt tca agt a	876
stacker	<u>gtt tgc ttg tcc agg tgg</u>	877
arrestor	<u>cca aac tcc gaa gga ggc g</u>	878
SRT	cggaagaagcagttggtgcgcctgttaaNH2	879
FRET probe	Fcaac(Cy3)gcttcctccg	880
probe	cgc tca cgc ctc ctt cgg agt ttg NH2	881
invader	ggg ttg tgg agt gag tgt tca agt a	882
stacker	<u>gtt ttg ctt gtc cag gtg g</u>	883
arrestor	<u>cca aac tcc gaa gga ggc g</u>	884
SRT	cggaagaagcagttggtgcgcctgttaaNH2	885
FRET probe	Fcaac(Cy3)gcttcctccg	886
probe	cgc tca cgc ctc ctt cgg agt ttNH2	887
invader	ggg ttg tgg agt gag tgt tca agt a	888
stacker	<u>ggg ttt gct tgt cca ggt g</u>	889
arrestor	<u>cca aac tcc gaa gga ggc g</u>	890
SRT	cggaagaagcagttggtgcgcctgttaaNH2	891
FRET probe	Fcaac(Cy3)gcttcctccg	892
probe	cgc tca cgc ctc ctt cgg agt ttNH2	893
invader	ggg ttg tgg agt gag tgt tca agt a	894
stacker	<u>gtt gct tgt cca ggt ggt cca g</u>	895
arrestor	<u>ccc aaa ctc cgg agg cg</u>	896
SRT	cggaagaagcagttggtgcgcctgttaaNH2	897
FRET probe	Fcaac(Cy3)gcttcctccg	898
probe	cgc cga gat cac cgg agt ttg ggNH2	899
invader	gtt gtg gag tga gtg ttc aag tat ta	900
stacker	<u>ttt gct tgt cca ggt ggt cca g</u>	901
arrestor	<u>cta gtg gcc tca aac cc</u>	902
SRT	cggaagaagcagttggtgcgcctgttaaNH2	903
FRET probe	Fcaac(Cy3)gcttcctccg	904

77/

hUbiquitin

probe cgc cga gat cac ctt tac att ttc tat cgt
 probe cgc cga gat cac ctt tac att ttc tat cgt NH2
 invader 5' -cct tcc tta tcc tgg atc ttg gca -3'
 arrestor acg ata gaa aat gta aag gtg atc
 SRT 5'-cgc agt gag aat gag gtg atc tgg gcggt-3'
 FRET probe 5'-Red-ctc-Z21-ttc tca gtg cg-3'

905
906
907
908
909
910

3' Amine

all 2'Ome bases
3' last 3 bases 2'Ome

hIL-2

probe gttcttttgtctcgcactgccNH2
 invader cca gca gta aat gct cca gtt gta ga
 stacker tag aac ttg aag tag gtg c
 arrestor caa aga aaa cac agg agg c
 SRT ccaggaagcaagtgaggcgtgacggu
 FRET probe Fcac(Z21)tgctctgtg

911
912
913
914
915
916

3' Amine

all 2'Ome bases
all 2'Ome bases
3' 3bases 2'Ome

probe aac gag gcg cac ctg tgt ttt ctt tg NH2
 invader cca gca gta aat gct cca gtt gta ga
 stacker tag aac ttg aag tag gtg c
 arrestor caa aga aaa cac agg tgc g
 SRT ccaggaagcaagtggtgcgcctcgttt
 FRET probe Fcac(Z21)tgctctgtg

917
918
919
920
921
922

3' Amine

all 2'Ome bases
all 2'Ome bases
3' last 3 bases 2'Ome

probe ccg tca cgc ctc cag ttg tag NH2
 invader aaa atc atc tgt aaa tcc agc agt aaa tga
 stacker ctg tgt ttt ctt tgt aga ac
 arrestor cta caa ctg gag gag gc
 SRT ccaggaagcaagtgaggcgtgacggu
 FRET probe Fcac(Z21)tgctctgtg

923
924
925
926
927
928

3' Amine

5' 6 bases 2'Ome
all 2'Ome bases
all 2'Ome bases
3' 3bases 2'Ome

probe aac gag gcg cac ctc cag ttg tag NH2
 invader aaa atc atc tgt aaa tcc agc agt aaa tga
 stacker ctg tgt ttt ctt tgt aga ac
 arrestor cta caa ctg gag gtg cg
 SRT ccaggaagcaagtggtgcgcctcgttt
 FRET probe Fcac(Z21)tgctctgtg

929
930
931
932
933
934

3' Amine

5' 6 bases 2'Ome
all 2'Ome bases
all 2'Ome bases
3' last 3 bases 2'Ome

78

probe	cgc tca cgc ctc tgc ttt ctt tgc aNH2	3' Amine	935
invader	gta aat cca gca gta aat gct cca gtt gta ga		936
stacker	<u>gaa ctt gaa gta ggt gca ctg tt</u>	all 2'Ome bases	937
arrestor	<u>tacaaagaaacacagagcgctNH2</u>	all 2'Ome bases, 3' amine	938
SRT	ccaggaagcaagtgaggcgtagcggg	3' 3bases 2'Ome	939
FRET probe	Fcac(Z21)tgctctgtg		940
probe	aac gag gcg cac ctg tgc ttt ctt tgc aNH2	3' Amine	941
invader	gta aat cca gca gta aat gct cca gtt gta ga		942
stacker	<u>gaa ctt gaa gta ggt gca ctg tt</u>	all 2'Ome bases	943
arrestor	<u>tac aaa gaa aac aca ggt gcg</u>	all 2'Ome bases	944
SRT	ccaggaagcaagtggtgagcgctcgttt	3' last 3 bases 2'Ome	945
FRET probe	Fcac(Z21)tgctctgtg		946
probe	cgc tca cgc ctc ctc cag ttg taa NH2	3' Amine	947
probe	cgc tca cgc ctc ctc cag ttg tat NH2	3' Amine	948
probe	cgc tca cgc ctc ctc cag ttg tac NH2	3' Amine	949
invader	<u>aaa atc atc tgc taa tcc agc agt aaa tga</u>	5' 6 bases 2'Ome	950
stacker	<u>ctg tgc ttt ctt tgc aga ac</u>	all 2'Ome bases	951
arrestor	<u>cta caa ctg gag gag gc</u>	all 2'Ome bases	952
SRT	ccaggaagcaagtgaggcgtagcggg	3' 3bases 2'Ome	953
FRET probe	Fcac(Z21)tgctctgtg		954
probe	gcc gtc acg cct ttc ttc atg NH2	3' Amine	955
invader	ttc tag aca ctg aag atg ttt cag ttc tgc gga		956
arrestor	<u>cat gcc caa gaa ggg agg cg NH2</u>	all 2'Ome bases, 3' Amine	957
SRT	cggaagcaagcagttgaggcgtagcggcNH2	3'2 bases 2'Ome, 3' Amine	958
FRET probe	Fcaac(Cy3)gctctctccg		959
probe	cgc tca cgc ctc taa ttc cat tca aaa tca tct NH2	3' Amine	960
invader	cat cct ggt gag ttt ggg att ctt gta att tat a		961
stacker	<u>gta aat cca gca gta aat gct cca gNH2</u>	all 2'Ome bases, 3' Amine	962
arrestor	<u>aga tga ttt tga atg gaa tta gag gcg NH2</u>	all 2'Ome bases, 3' Amine	963
SRT	cggaaagcaagcagttgaggcgtagcggcNH2	3'2 bases 2'Ome, 3' Amine	964
FRET probe	Fcaac(Cy3)gctctctccg		965
probe	ccg ccg aga tca cct gtc ttt tct ttg ta		966
invader	gta aat cca gca gta aat gct cca gtt gta ga		967
stacker	<u>gaa ctt gaa gta ggt gca ctg tt</u>	All 2' Ome	968
stacker	gaa ctt gaa gta ggt gca ctg tt		969

stacker	gaa ctt gaa gta ggt gca ctg tt	970
stacker	gaa ctt gaa gta ggt gca ctg tt	971
arrestor	tac aaa gaa aac aca ggt gat ct	972
SRT	cggaggaagcagtggtgctcgcgcgNH2	973
FRET probe	Fcaac(Cy3)gcttctctccg	974
probe	aac gag gcg cac cct tct tgg gca tgnH2	975
invader	ttc tag aca ctg aag atg ttt cag ttc tgt gga	976
arrestor	cat gcc caa gaa ggg tgc gNH2	977
SRT	cggagaagcagtggtgcgcctctgtaaNH2	978
FRET probe	Fcaac(Cy3)gcttctctccg	979
probe	aac gag gcg cac taa ttc cat tca aaa tca tct	980
invader	cat cct ggt gag ttt ggg att ctt gta att tat a	981
stacker	gta aat cca gca gta aat gct cca gNH2	982
arrestor	aga tga ttt tga atg gaa tta gtg gt NH2	983
SRT	cggagaagcagtggtgcgcctctgtaaNH2	984
FRET probe	Fcaac(Cy3)gcttctctccg	985

hIL-4	cct gtc tgc ctg cca gtt gtg ttc ttg gag NH2	986
probe	ccc tgc aga aga ttt cct tct a	987
invader	ccc tgc aga tgg ttt cct tct a	988
invader	ctc caa gaa cac aac tgg cag cNH2	989
arrestor	ctc caa gaa cac aac tgg cag cga NH2	990
arrestor	ctc caa gaa cac aac tgg cag cga gaNH2	991
arrestor	cggaggaagcagtggtgcgcctctgtaaNH2	992
SRT	Fcaac(Cy3)gcttctctccg	993
FRET probe		
probe	aac gag gcg cac ctt gga ggc agc aaa NH2	994
probe	aac gag gcg cac ctt gga ggc agc aaNH2	995
invader	aag gtt tcc ttc tca gtt gtg tta	996
arrestor	ctt tgc tgc ctc caa ggt gcg NH2	997
SRT	cggaggaagcagtggtgcgcctctgtaaNH2	998
FRET probe	Fcaac(Cy3)gcttctctccg	999
probe	cag tca cgt ctc tgg agg cag caa aga tg NH2	1000
invader	aag gtt tcc ttc tca gtt gtg ttc ta	1001
arrestor	cat ctt tgc tgc ctc cag aga cg NH2	1002

SRT	gctactgagatgaaggagacgtgactgtanNH2	1003
FRET probe	Fcttc(Cy3)ictcagtagc	1004
probe	aac gag gcg cac ctt gga ggc agc aaa g NH2	1005
invader	aag gtt tcc ttc tca gtt gtc tta	1006
arrestor	<u>ctt tgc tgc ctc caa ggt ggc NH2</u>	1007
SRT	cggaggaagcagttggtgcgcctcgtaa	1008
FRET probe	Fcaac(Cy3)gcttctccg	1009

mIL-2	cgc cga gat cac ccc ttt agt ttt aca aca gtNH2	1010
probe	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1011
invader	<u>act gtt gta aaa cta aag ggg gtc atc t NH2</u>	1012
arrestor	cggaggaagcgttggatctcgcgNH2	1013
SRT	Fcaac(Cy3)gcttctccg	1014
FRET probe		

all 2'Ome bases, 3' Amine
3' last two bases are 2' Ome, 3' Amine

probe	tgc cgc cga gat cac ccc ttt agt ttt aca aca gtNH2	1015
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1016
arrestor	<u>act gtt gta aaa cta aag ggg gtc NH2</u>	1017
arrestor	<u>act gtt gta aaa cta aag ggg gtc at NH2</u>	1018
arrestor	<u>act gtt gta aaa cta aag ggg gtc at ctNH2</u>	1019
arrestor	<u>act gtt gta aaa cta aag ggg gtc at ctgNH2</u>	1020
SRT	cggaggaagcgttggatctcgcgcaNH2	1021
FRET probe	Fcaac(Cy3)gcttctccg	1022

all 2'Ome bases, 3' Amine
all 2'Ome bases, 3' Amine
all 2'Ome bases, 3' Amine
all 2'Ome bases, 3' Amine
3' Last 2bases 2'Ome, 3' Amine

probe	gc cgc cga gat cac ccc ttt agt ttt aca aca gtNH2	1023
probe	c cgc cga gat cac ccc ttt agt ttt aca aca gtNH2	1024
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1025
arrestor	<u>act gtt gta aaa cta aag ggg gtc at NH2</u>	1026
SRT	cggaggaagcgttggatctcgcgcaNH2	1027
FRET probe	Fcaac(Cy3)gcttctccg	1028

all 2'Ome bases, 3' Amine
3' Last 2bases 2'Ome, 3' Amine

probe	aac gag gcg cac ccc ttt agt ttt aca aca gt NH2	1029
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1030
arrestor	<u>agtaactgtgtataaactaaaggggtgcg</u>	1031
SRT	cggaggaagcagttggtgcgcctcgtaa	1032
FRET probe	Fcaac(Cy3)gcttctccg	1033

all 2'Ome bases, 3' Amine
3' last 5 bases 2'Ome

probe	aac gag gcg cac ccc ttt agt ttt aca aca gt NH2	1034
-------	--	------

82

invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1035
arrestor	<u>agt aac tgt tgt aaa act aaa ggg gtg cg NH2</u>	1036
SRT	cggaggagcagttgtgcgcctcgtaa	1037
FRET probe	Fcaac(Cy3)gcttctccg	1038
probe	ccgtcacgcctcccttagttttacaacNH2	1039
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1040
stacker	<u>agt tac tct gat att gct gat gaa att ctc ag</u>	1041
arrestor	<u>gtgtaaaactaaaggggagggcg</u>	1042
SRT	cggaagaagcagttggaggcgtgacggNH2	1043
FRET probe	Fcaac(Cy3)gcttctccg	1044
probe	cgcgagatcaccccttagttttacaacNH2	1045
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1046
stacker	<u>agt tac tct gat att gct gat gaa att ctc ag</u>	1047
arrestor	<u>gtgtaaaactaaagggggtgac</u>	1048
SRT	cggaagaagcagttgtgacgtcgcgNH2	1049
FRET probe	Fcaac(Cy3)gcttctccg	1050
probe	ccgtcacgcctcccttagttttacaacNH2	1051
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1052
stacker	<u>cagttactctgatatgtcgtgaaattctca</u>	1053
arrestor	<u>gtgtaaaactaaaggggagggcg</u>	1054
SRT	cggaagaagcagttggaggcgtgacggNH2	1055
FRET probe	Fcaac(Cy3)gcttctccg	1056
probe	ccgtcacgcctcccttagttttacaacNH2	1057
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1058
stacker	<u>cagttactctgatatgtcgtgaaattctca</u>	1059
arrestor	<u>gtgtaaaactaaaggggagggcg</u>	1060
SRT	ccaggagcagttggaggcgtgacggNH2	1061
FRET probe	Fcaac(Cy3)gcttctg	1062
<hr/>		
mIL-10		
probe	ccg tca cgc ctc cgc tta gct aag at NH2	1063
invader	cga ggt tt cca agg agt tgt tta	1064
stacker	<u>ccc tgg atc aga ttt aga gag c</u>	1065
arrestor	<u>atc tta gct aac ggg agg cg</u>	1066
SRT	cggaagaagcagttggaggcgtgacggNH2	1067

82/-

FRET probe	Fcac(Cy3)gcttcctccg	1068
probe	ccg tca cgc ctc agt tgt ttc cgt tNH2	1069
invader	aga ggt aca aac gag gtt ttc caa ggc	1070
stacker	<u>agc taa gat ccc tgg atc aga ttt aga ga</u>	1071
arrestor	<u>aac gga aac aac tga ggc g</u>	1072
SRT	ccaggaaagcaagtggaggcgtagacggg	1073
FRET probe	Fcac(Z21)tgcttcgtgg	1074
probe	ccg tca cgc ctc ccg tta gct aNH2	1075
invader	caa acg agg ttt tcc aag gag ttg a	1076
stacker	<u>aga tcc ctg gat cag att tag aga gct c</u>	1077
arrestor	<u>tag cta acg gaa aga ggc g</u>	1078
SRT	ccaggaaagcaagtggaggcgtagacggg	1079
FRET probe	Fcac(Z21)tgcttcgtgg	1080
probe	ccg tca cgc ctc ccg tta gNH2	1081
invader	aga ggt aca aac gag gtt ttc caa gga ga	1082
stacker	<u>cta aga tcc ctg gat cag att tag aga g</u>	1083
arrestor	<u>ctaacggaaacaagaggcg</u>	1084
SRT	ccaggaaagcaagtggaggcgtagacggg	1085
FRET probe	Fcac(Z21)tgcttcgtgg	1086
hIFN- γ		
probe	aac gag gcg cac ctt acc aat gcc taa gaa aag agt tNH2	1087
invader	tgc att att ttt ctg tca ctc tcc tct ttc caa tta	1088
arrestor	<u>aac tct ttt ctt agg cat ttt gaa ggt gcg NH2</u>	1089
SRT	cggaggaaagcagttggtgcgcctcgttaaNH2	1090
FRET probe	Fcac(Cy3)gcttcctccg	1091
probe	cag tca cgt ctc tct tca aaa tgc cta aga aaa gag tNH2	1092
invader	tct gca tta ttt ttc tgc cac tct cct ctt tcc aat a	1093
arrestor	<u>act ctt ttc tta ggc att ttg aag aga gac gNH2</u>	1094
SRT	<u>gctactgagatgaaggagacgtgactgttaNH2</u>	1095
FRET probe	Fcttc(Cy3)tcctagtagc	1096
mIFN- γ		
probe	aac gag gcg cac cct ttt gcc agt tcc NH2	1097

invader	gct ctg cag gat ttt cat gtc acc ata			1098
arrestor	<u>gag gaa ctg gca aaa ggg tgc gNH2</u>	<u>all 2'Ome bases, 3' Amine</u>		1099
SRT	<u>gctactgagatgaaggagacgtgactgtanNH2</u>	<u>all 2'Ome bases, 3' Amine</u>		1100
FRET probe	Fcttc(Cy3)ctcagtagc			1101
probe	aac gag gcg cac cct ttt gcc agt NH2	3' Amine		1102
invader	gct ctg cag gat ttt cat gtc acc ata			1103
stacker	<u>tcc tcc aga tat cca aga aga gac tc</u>	<u>all 2'Ome bases</u>		1104
arrestor	<u>act ggc aaa agg cgg gc</u>	<u>all 2'Ome bases</u>		1105
SRT	cgg agg aaag cag ttg gtg cgc ctc <u>guu aa NH2</u>	3' last 5 bases <u>2'Ome</u>		1106
SRT	cgg aag aaag cag ttg gtg cgc ctc <u>guu aa NH2</u>	3' last 5 bases <u>2'Ome</u>		1107
FRET probe	Fcaac(Cy3)gcttctccg			1108
probe	gcc gca cgc cgc ctt ttg cca gt NH2	3' Amine		1109
invader	gct ctg cag gat ttt cat gtc acc ata			1110
stacker	<u>tcc tcc aga tat cca aga aga gac tc</u>	<u>all 2'Ome bases</u>		1111
arrestor	<u>act ggc aaa agg cgg gc</u>	<u>all 2'Ome bases</u>		1112
SRT	cgg agg aag cag ttg cgg cgt gcg gca NH2			1113
FRET probe	Fcaac(Cy3)gcttctccg			1114
probe	aac gag gcg cac cct ttt gcc agt tc NH2	3' Amine		1115
invader	gct ctg cag gat ttt cat gtc acc ata			1116
stacker	<u>ctc cag ata tcc aag aag aga ctc</u>	<u>all 2'Ome bases</u>		1117
arrestor	<u>gaa ctg gca aaa ggg tgc g</u>	<u>all 2'Ome bases</u>		1118
SRT	cggaggagcagttggtgcgctcgttaaNH2	3' last5 bases 2'Ome		1119
FRET probe	Fcaac(Cy3)gcttctccg			1120
<hr/>				
hIL-8				
probe	ccg tca cgc ctc ctt ggc aaa act gca ccNH2	3' Amine		1121
probe	ccg tca cgc ctc ctt ggc aaa act gca cca NH2	3' Amine		1122
invader	ctt tat gca ctg aca tct aag ttc ttt agc act ca			1123
arrestor	<u>tgg tgc agt ttt gcc aag gag gcg NH2</u>	<u>all 2'Ome bases, 3' Amine</u>		1124
arrestor	<u>tgg tgc agt ttt gcc aag gag gcg tg NH2</u>	<u>all 2'Ome bases, 3' Amine</u>		1125
SRT	cggagaagcagttgaggcggtgacggcNH2	3'2 bases <u>2'Ome</u> , 3'Amine		1126
FRET probe	Fcaac(Cy3)gcttctccg			1127
probe	ccg tca cgc ctc cat ctt cac tga ttc ttg gNH2	3' Amine		1128
probe	ccg tca cgc ctc cat ctt cac tga ttc ttg gaNH2	3' Amine		1129
invader	agt gtt gaa gla gat ttg ctt gaa gtt tca ctg ga			1130

stacker	<u>gat acc aca gag aat gaa tttt</u>	all 2'Ome bases	1131
arrestor	<u>tcc aag aat cag tga aga tgg agg cg NH2</u>	all 2'Ome bases, 3' Amine	1132
arrestor	<u>tcc aag aat cag tga aga tgg agg cgt gNH2</u>	all 2'Ome bases, 3' Amine	1133
arrestor	<u>g aat cag tga aga tgg agg cg</u>	all 2'Ome bases	1134
SRT	cggaagacgacgttgaggcgtgacggcNH2	3'2 bases 2'Ome, 3' Amine	1135
FRET probe	Fcaac(Cy3)gctctctccg		1136
probe	cgc tca cgc cct tgg ctc aat ttt gct NH2	3' Amine	1137
invader	cca ttc aat tcc tga aat taa agt tgc gat att ctc ttg gca		1138
invader	<u>cc tga aat taa</u> agt tgc gat att ctc ttg gca	5' 10 bases are 2'Ome	1139
invader	cc tga aat taa agt tgc gat att ctc ttg gca		1140
arrestor	<u>agc aaa att gag cca agg gag gcg NH2</u>	all 2'Ome bases, 3' Amine	1141
arrestor	<u>agc aaa att gag cca agg gag gcg tgnNH2</u>	all 2'Ome bases, 3' Amine	1142
SRT	cggaagaagcagttggaggcgtgacggcNH2	3'2 bases 2'Ome, 3' Amine	1143
FRET probe	Fcaac(Cy3)gctctctccg		1144
probe	cgc tca cgc ctc cat ctt cac tga ttc ttg NH2	3' Amine	1145
invader	ttc tag caa acc cat tca att cct gaa att aaa gtt cgg ata ttc ta		1146
invader	<u>cc cat tca att</u> cct gaa att aaa gtt cgg ata ttc ta	5' 10 bases 2'Ome	1147
invader	cc cat tca att cct gaa att aaa gtt cgg ata ttc ta		1148
arrestor	<u>cca agg gcc aag gag gcg tNH2</u>		1149
SRT	cggaagaagcagttggaggcgtgacggcNH2	3'2 bases 2'Ome, 3' Amine	1150
FRET probe	Fcaac(Cy3)gctctctccg		1151
probe	cgc tca cgc ctc cat ctt cac tga ttc ttg NH2		1152
invader	agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga		1153
stacker	<u>ttg gat acc aca gag aat gaa tt</u>	all 2'Ome bases	1154
SRT	cggaagaagcagttggaggcgtgacggcNH2	3'base 2'Ome, 3' Amine	1155
FRET probe	Fcaac(Cy3)gctctctccg		1156
probe	cgc tca cgc ctc cat ctt cac tga tt NH2		1157
invader	agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga		1158
stacker	<u>ctt gga tac cac aga gaa tga att</u>		1159
SRT	cggaagaagcagttggaggcgtgacggcNH2	3'base 2'Ome, 3' Amine	1160
FRET probe	Fcaac(Cy3)gctctctccg		1161
probe	cgc tca cgc ctc cat ctt cac tga ttc ttg NH2		1162
invader	agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga		1163
helper	<u>ata-cca-cag-aga-atg-aat-att-att-atg</u>	all 2'Ome bases	1164
arrestor	<u>tcc aag aat cag tga aga tgg agg cgt gNH2</u>	all 2'Ome bases, 3' Amine	1165

SRT	cggaggaagcagttggagcggtgacggtNH2	3' base <u>2'Ome</u> , 3'Amine	1166
FRET probe	Fcaac(Cy3)gcttctccg		1167
SRT	cggaggaagcagttggtgatctcgcggtNH2	3' Amine	1168
FRET probe	Fcaac(Cy3)gcttctccg		1169
SRT	cggaggaagcagttggagcggtgacggtNH2	3'base <u>2'Ome</u> , 3'Amine	1170
FRET probe	Fcaac(Cy3)gcttctccg		1171
SRT	ccaggagcaagtgaggcggtgacggu	3' 3bases <u>2'Ome</u>	1172
FRET probe	Fcac(Z21)tgctctggtg		1173
SRT	cggaggaagcagttggtgatctcgcggtNH2	3' 2 last base <u>2' Ome</u> , 3' Amine	1174
FRET probe	Fcaac(Cy3)gcttctccg		1175
SRT	cggaggaagcagttggagcggtgacggtNH2	3'2 bases <u>2'Ome</u> , 3'Amine	1176
FRET probe	Fcaac(Cy3)gcttctccg		1177
SRT	ccaggagcaagtggtgcgcctcgttt	3' last 3 bases <u>2'Ome</u>	1178
FRET probe	Fcac(Z21)tgctctggtg		1179
SRT	cggaggaagcagttggtgcgcctcgtttNH2	3' last5 bases 2'Ome	1180
FRET probe	Fcaac(Cy3)gcttctccg		1181
SRT	cggaggaagcagttggtgatctcgcggtNH2	3' Last 2bases 2'Ome, 3' Amine	1182
FRET probe	Fcaac(Cy3)gcttctccg		1183
SRT	gctactgagatgaaggagacgtgactgtNH2	3' Amine	1184
FRET probe	Fcttc(Cy3)tcctcagtagc		1185
SRT	ccaggagcaagttggagcggtgacggtNH2	3' 2 bases <u>2'Ome</u> , 3'Amine	1186
FRET probe	Fcaac(Cy3)gcttctggtg		1187

h3A4 probe agg agc cac tcc att gga tga agc
h3A4 invader atg tac aga atc ccc ggt tat tta tgc aga
Capture Sequence

h3A4 probe	gtg gcg tat cac aga caa tga gag	1190
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1191
Capture Sequence		
Set 2/Set 3		
h3A4 probe	AAC GAG GCG CAC CAC AGA CAA TGA GAG	1192
h3A4 arrestor	<u>CCTCATTGCTGCTGGTGGC-NH2</u>	1193
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1194
h3A4 stacking oligo	agctcaatgcatgtacagaatccccgg	1195
h3A4 stacking oligo	<u>agctcaatgcatgtacagaatccccgg</u>	1196
SRT		
FRET Oligo		
Set 4		
h3A4 probe	aac gag gcg cac cac aga caa tga gag ag-NH2	1197
h3A4 arrestor	<u>ctc tct cat tgt ctg tgg tgc g-NH2</u>	1198
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1199
h3A4 stacking oligo	<u>ctc aat gca tgt aca gaa tcc ccg gtt</u>	1200
SRT		
FRET Oligo		
Set 5		
h3A4 probe	aac gag gcg cac cac aga caa tga gag agc t-NH2	1201
h3A4 arrestor	<u>agc tct ctc att gtc tgt ggt gcg-NH2</u>	1202
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1203
SRT		
FRET probe	FL-caa-c(cy3)g-ctt-cct-ccg	1204
Set 6		
h3A4 probe	aac gag gcg cac cac aga caa tga gag agc-NH2	1205
h3A4 arrestor	<u>gct ctc tca ttg tct gtg gtg cg-NH2</u>	1206
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1207
SRT		
FRET probe	FL-caa-c(cy3)g-ctt-cct-ccg	1208
Set 7/Set 8		
h3A4 probe	aac gag gcg cac cac aga caa tga gag a-NH2	1209
h3A4 probe	aac gag gcg cac cac aga caa tga gag a	1210
h3A4 arrestor	<u>tct ctc att gtc tgt ggt gcg c-NH2</u>	1211
h3A4 stacking oligo	<u>gct caa tgc atg tac aga atc ccc ggt t</u>	1212

1213

h3A4 invader
SRT
FRET Oligo

1214
1215
1216
1217

Set 9
h3A4 probe
h3A4 arrestor
h3A4 invader
h3A4 stacking oligo
SRT
FRET Oligo

1218
1219
1220
1221

Set 1/Set 2
h3A4 probe
h3A4 probe
h3A4 invader
h3A4 arrestor
SRT

1222
1223
1224
1225
1226
1227

Set 1 / Set 2 / Set 3
h3A4 probe
h3A4 arrestor
h3A4 invader
h3A4 stacking oligo
h3A4 stacking oligo
h3A4 stacking oligo
SRT
FRET

1228
1229
1230
1231

Set 4/Set 5
h3A4 probe
h3A4 probe
h3A4 invader
h3A4 stacking oligo
SRT
FRET

1232

Set 6/ Set 7/ Set 8
h3A4 probe

28

h3A4 probe	ccg tca cgc ctc gcc cca cg - NH2	1233
h3A4 probe	ccg tca cgc ctc gcc cca ct - NH2	1234
h3A4 arrestor	tgt ggg gcg agg cg	1235
h3A4 invader	cag cac agg ctg ttg acc atc ata aaa c	1236
h3A4 stacking oligo	cuu-uuc-cau-acu-uuu-uau-gac-auu-c	1237
SRT		
FRET		

Set 1		
h3A4 probe	ccg tca cgc ctc ata aaa gcc c -NH2	1238
h3A4 arrestor	ggg ctt tta tga tca ggc g	1239
h3A4 invader	cag cac agg ctg ttg acc c	1240
h3A4 stacking oligo	cac act ttt cca tac ttt tta tg	1241
SRT		
FRET		

Set 2		
h3A4 probe	aac gag gcg cac cca ttg gat gaa g - NH2	1242
h3A4 arrestor	ctt cat cca atg ggt gcg c	1243
h3A4 invader	gla cag aat ccc cgg tta ttt atg cag ta	1244
h3A4 stacking oligo	ccc atc ttc att tca gag	1245
SRT		
FRET		

Set 1		
h3A5 probe	gtg gcg tat cgt gtc taa ttt caa g	1246
h3A5 invader	aat ggg ttt ttc tgg ttg aag aag tcc ttg a	1247
Capture Sequence		

Set 2/Set 3		
h3A5 probe	AACGAGGCGCACCGTGCTAATTTCAAG	1248
h3A5 probe	AACGAGGCGCACCGTGCTAATTTCAAGGG-Pi	1249
h3A5 arrestor	CTTGAAATTAGACACGGTGGC-NH2	1250
h3A5 invader	aat ggg ttt ttc tgg ttg aag aag tcc ttg a	1251
SRT		
FRET		

Set 4		
h3A5 probe	AACGAGGCGCACCGTGCTAATTTCAAG	1252
h3A5 arrestor	CTTGAAATTAGACACGGTGGC-NH2	1253

h3A5 invader	aat ggg tt ttc tgg ttg aag aag tcc ttg a	1254
h3A5 stacking oligo	ggg atc tgt gtt tct tta caa ggt	1255
SRT		
FRET		
Set 5		
h3A5 probe	AACGAGGCGCACCGTGCTCTAATTTCAAG	1256
h3A5 arrestor	<u>ctt gaa att aga cac ggt tct c</u>	1257
h3A5 invader	ggg tt tct tga aga agt cct tga	1258
h3A5 stacking oligo	<u>ggg atc tct gtt tct</u>	1259
SRT		
FRET		
Set 6		
h3A5 probe	AACGAGGCGCACCGTGCTCTAATTTCAAGGG-NH2	1260
h3A5 arrestor	<u>CCCTTGAAATTAGACACGGTGCG</u> -NH2	1261
h3A5 invader	aat ggg tt ttc tgg ttg aag aag tcc ttg a	1262
SRT		
FRET probe	FL-caa-c(cy3)g-ctt-cct-cog	1263
Set 7/Set 8		
h3A5 probe	aac gag gcg cac cgt gtc taa tt caa gg-NH2	1264
h3A5 probe	aac gag gcg cac cgt gtc taa tt caa gg	1265
h3A5 arrestor	<u>cct tga aat tag aca cgg tgc gc</u> -NH2	1266
h3A5 arrestor	<u>cct tga aat tag aca cgg tgc gc</u>	1267
h3A5 invader	aat ggg tt ttc tgg ttg aag aag tcc ttg a	1268
h3A5 stacking oligo	gga tct gtg tt ctt tac aag gtt tga agg ag	1269
SRT		
FRET		
Set 9		
h3A5 probe	aac gag gcg cac cgt gtc taa tt caa-NH2	1270
h3A5 arrestor	<u>ttg aaa tta gac acg gtt cgc</u> -NH2	1271
h3A5 invader	aat ggg tt ttc tgg ttg aag aag tcc ttg a	1272
h3A5 stacking oligo	ggg gat ctg tgt ttc tt aca agg	1273
SRT		
FRET		
Set 10		
h3A5 probe	aac gag gcg cac cgt gtc taa tt ca - NH2	1274

901

1275
1276
1277

h3A5 arrestor
h3A5 invader
h3A5 stacking oligo
SRT
FRET

h3A5 arrestor
h3A5 invader
h3A5 stacking oligo
SRT
FRET

1278
1279

h3A5 probe
h3A5 invader
h3A5 stacking oligo
SRT
FRET

h3A5 probe
h3A5 invader
h3A5 stacking oligo
SRT
FRET

1280
1281

h3A5 probe
h3A5 invader
h3A5 stacking oligo
SRT
FRET

h3A5 probe
h3A5 invader
h3A5 stacking oligo
SRT
FRET

1282
1283
1284
1285

h3A5 probe
h3A5 invader
h3A5 stacking oligo
SRT
FRET

h3A5 probe
h3A5 invader
h3A5 stacking oligo
SRT
FRET

1286
1287
1288
1289

h3A5 probe
h3A5 invader
h3A5 stacking oligo
SRT
FRET

h3A5 probe
h3A5 invader
h3A5 stacking oligo
SRT
FRET

1290
1291
1292
1293

h3A5 probe
h3A5 invader
h3A5 stacking oligo
SRT
FRET

h3A5 probe
h3A5 invader
h3A5 stacking oligo
SRT
FRET

Set 2

9/11

h3A5 probe ccg tca cgc ctg ttc ata cgt tcc -NH2
h3A5 arrestor gga acg tat gaa cag gcg
h3A5 invader cca gca cag gga gtt gac ca
h3A5 stacking oligo cca cat ttt tcc ata ctt t
SRT
FRET

1294
1295
1296
1297

Set 1-Set 4
h3A5 probe aac gag gcg cac agt tga cct tca
h3A5 probe aac gag gcg cac agt tga cct tca
h3A5 probe aac gag gcg cac agt tga cct tca - HEX
h3A5 arrestor tga agg tca act gtg cgc
h3A5 invader gtg atg gcc agc aca ggg c
h3A5 stacking oligo tac gtt ccc cac att ttt c
h3A5 stacking oligo tac gtt ccc cac att ttt c
SRT
FRET

1298
1299
1300
1301
1302
1303
1304

Set 5
h3A5 probe ccg tca cgc ctg agt tga cct tca
h3A5 arrestor tga agg tca act gag gcg
h3A5 invader gtg atg gcc agc aca ggg c
h3A5 stacking oligo tac gtt ccc cac att ttt c
SRT
FRET

1305
1306
1307
1308

Set 6
h3A5 probe aac gag gcg cac tcc tct caa gt -NH2
h3A5 arrestor act tga gag gag tgc gc
h3A5 invader cca ttt att tca aca tct ttc ttg caa ga
h3A5 stacking oligo cta ata gca act ggg aat aat c
SRT
FRET

1309
1310
1311
1312

Set 7
h3A5 probe ccg tca cgc ctg tcc tct caa gt - NH2
h3A5 arrestor act tga gag gag agg cg
h3A5 invader cca ttg att tca aca tct ttc ttg caa ga
h3A5 stacking oligo cta ata gca act ggg aat aat c
SRT

1313
1314
1315
1316

FRET

Set 8

h3A5 probe aac gag gcg cac agt tga cct tc - NH2
h3A5 arrestor **tga agg tca act gfg cgc**
h3A5 invader gfg atg gcc agc aca ggg c
h3A5 stacking oligo **ata cgt tcc cca cat ttt tc**
SRT
FRET

1317
1318
1319
1320

Set 1

h3A7 Probe tgg cgt atc tgg att aaa tct taa aag
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a
Capture Oligo

1321
1322

Set 2

h3A7 Primary Probe AACGAGGCGCACTGGATTAAATCTTAAAG
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a
h3A7 Arrestor **CTTTAAGATTTAATCCAGTGCG-NH2**
SRT
FRET

1323
1324
1325

Set 3

h3A7 Primary Probe AACGAGGCGCACTGGATTAAATCTTAAAG
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a
h3A7 Arrestor **CTTTAAGATTTAATCCAGTGCG-NH2**
h3A7 Stacking Oligo **ctt ctt ggt gtt ttc ca**
SRT
FRET

1326
1327
1328
1329

Set 4

h3A7 Probe agg agc cac tca tcc ctt gac t
h3A7 Invader oligo ctt agg gaa atc agg ctc cac tta cgg ta
Capture Oligo

1330
1331

Set 5/Set 6

h3A7 Primary Probe AACGAGGCGCACCTCATCCCTTGACT
h3A7 Primary Probe AACGAGGCGCACCTCATCCCTTGACT-NH2
h3A7 Arrestor **AGTCAAGGGAAGGAGTGCG-NH2**
h3A7 Invader oligo ctt agg gaa atc agg ctc cac tta cgg ta

1332
1333
1334
1335

SRT
FRET

Set 7 - Set 10

h3A7 Primary Probe
h3A7 Arrestor
h3A7 Invader oligo
h3A7 Stacking Oligo
h3A7 Stacking Oligo
h3A7 Stacking Oligo
h3A7 Stacking Oligo

1336
1337
1338
1339
1340
1341
1342

SRT
FRET

Set 11

h3A7 Primary Probe
h3A7 Primary Probe
h3A7 Arrestor
h3A7 Invader oligo
h3A7 Stacking Oligo

1343
1344
1345
1346
1347

SRT
FRET

Set 1

h3A7 Probe
h3A7 Invader
Capture Sequence

1348
1349

Set 2

h3A7 Primary Probe
h3A7 Invader
h3A7 Arrestor

1350
1351
1352

SRT
FRET

Set 3

h3A7 Primary Probe
h3A7 Invader
h3A7 Arrestor
h3A7 Stacking Oligo

1353
1354
1355
1356

94/

SRT
FRET

Set 1

h3A7 probe
h3A7 arrestor
h3A7 invader
h3A7 stacking oligo

SRT
FRET

1357
1358
1359
1360

Set 2 - Set 4

h3A7 probe
h3A7 probe
h3A7 probe
h3A7 arrestor
h3A7 invader
h3A7 stacking oligo

SRT
FRET

1361
1362
1363
1364
1365
1366

Set 1

h3A7 probe
h3A7 arrestor
h3A7 invader
h3A7 stacking oligo

SRT
FRET

1367
1368
1369
1370

Set 2

h3A7 probe
h3A7 arrestor
h3A7 invader
h3A7 stacking oligo

SRT
FRET

1371
1372
1373
1374

Set 1

h3A7 probe
h3A7 arrestor

SRT
FRET

1375
1376

h3A7 invader	gga aat cag gct cca ctt acg gtc a	1377
h3A7 stacking oligo	act cag cct tta gaa caa tg	1378
SRT		
FRET		
Set 1		
h3A7 probe	cog tca cgc ctc taa agt aat ttg agg tc -NH2	1379
h3A7 arrestor	gac ctc aaa tta ctt tag agg cg	1380
h3A7 invader	cgt ctt cat ttc agg gtt cta tt ga	1381
h3A7 stacking oligo	tct ggt gtt ctg gg	1382
SRT		
FRET		
Set 2		
h3A7 probe	aac gag gcg cac taa agt aat ttg agg tc - NH2	1383
h3A7 arrestor	gac ctc aaa gga ctt tag tgc gc	1384
h3A7 invader	cgt ctt cat ttc agg gtt cta tt ga	1385
h3A7 stacking oligo	tct ggt gtt ctg gg	1386
SRT		
FRET		
Set 1		
r4A1 Probe	tgg-cgt-atc-tag-gct-ttg-ctt-cc	1387
r4A1 Invader	ttc atg tag tca ggg tca tag aca att aag a	1388
Capture Sequence		
Set 2		
r4A1 Primary Probe	AACGAGGCGCACTAGGCTTTGCTTCC	1389
r4A1 Arrestor	GGAAAGCAAGCCTAGTGCG-NH2	1390
r4A1 Arrestor	gga agc aaa gcc tag tgc gc-NH2	1391
r4A1 Invader	ttc atg tag tca ggg tca tag aca att aag a	1392
FRET Probe 1		
Set 3		
r4A1 Primary Probe	aac gag gcg cac tag gct ttg ctt ccc-NH2	1393
r4A1 Arrestor	ggg aag caa agc cta ctg cgc-NH2	1394
r4A1 Invader	ttc atg tag tca ggg tca tag aca att aag a	1395
SRT		
FRET Probe 1		

Set 4
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ctt ctt c-NH2 1396
 r4A1 Arrestor **gaa gca aag cct agt gcg c** 1397
 r4A1 Stackers ccc aga acc atc gag gaa agg c 1398
 r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a 1399
 SRT
 FRET Probe 1

Set 5
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ctt ctt-NH2 1400
 r4A1 Arrestor aag caa agc cta gtg cgc-NH2 1401
 r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a 1402
 r4A1 Stackers ccc cag aac cat cga gga aag g 1403
 r4A1 Stackers **ccc cag aac cat cga gga aag g** 1404
 SRT
 FRET Probe 1

Set 6
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ct ctt-NH2 1405
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ct - HEX 1406
 r4A1 Probe aac gag gcg cac tag gct ttg ct 1407
 r4A1 Arrestor **agc aaa gcc tag tgc gc-NH2** 1408
 r4A1 Arrestor **agc aaa gcc tag tgc gc** 1409
 r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a 1410
 r4A1 Stackers tcc cca gaa cca tgc agg aaa gg 1411
 r4A1 Stackers **tcc cca gaa cca tgc agg aaa gg** 1412
 SRT
 FRET Probe 1

Set 1
 r4A1 Probe ata cgg ttg gtc ttg acc tgc c 1413
 r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac 1414
 Capture Sequence

Set 2
 r4A1 Primary Probe AACGAGGCGCAGCTCTTGACCTGCC 1415
 r4A1 Arrestor **GGCAGGTCAAGACGTGCG-NH2** 1416
 r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac 1417

SRT

FRET Probe 1

Set 3

r4A1 Primary Probe AACGAGGCGCACGTCTTGACCTGC-Pi

r4A1 Arrestor GGCAGGTCAAGACGTCG-NH2

r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac

SRT

FRET Probe 1

1418
1419
1420

Set 1

r4A1 Probe tgg cgt atc tta gat gga gta agg a

r4A1 Invader att cct cat aat tca aaa ggg act tag tag gt

1421
1422

Set 2

r4A1 Primary Probe AACGAGGCGCACTTAGATGGAGTAAGGA

r4A1 Arrestor TCCCTACTCCAICTAAGTGG-NH2

SRT

FRET Probe 1

1423
1424

Set 1

r4A1 Primary Probe aac gag gcg cac tgg ata ccc ttg gg-NH2

r4A1 Arrestor ccc.aag.ggt.atc.cag.tgc.gc-NH2

r4A1 Invader ggt gga gac cat aaa tgg aga glg tga cta

SRT

FRET Probe 1

1425
1426
1427

Set 1

r4A2 Probe aac gag gcg cac agg tgt ctg gag taa aag-NH2

r4A2 Arrestor ctt.tta.ctc.cag.aca.cct.gtg.cgc-NH2

r4A2 Invader gtc cac gca caa gct ggg ac

SRT

FRET Probe 1

1428
1429
1430

Set 1

r4A2 Probe aac gag gcg cac aga agg ccc ctt-NH2

r4A2 Arrestor aag.ggg.cct.tct.gtg.cgc-NH2

r4A2 Invader cct tga aca gca cca gaa ata gac tga gca c

r4A2 stacking oligo gga aga acc cag aga cac cat cc

SRT

1431
1432
1433
1434

98/

FRET Probe 1

Set 2

r4A2 Probe
r4A2 Arrestor
r4A2 Invader
SRT

ccg tca cgc ctc aga agg ccc ctt-NH2
aag ggg cct tct gag ggc-NH2
cct tga aca gca cca gaa ata gac tga gca c

1435
1436
1437

FRET Probe 1

Set 3

r4A2 Probe
r4A2 Arrestor
r4A2 Invader
SRT

aac gag gcg cac aga agg ccc ctt g-NH2
caa ggg gcc ttc tgt ggc c-NH2
cct tga aca gca cca gaa ata gac tga gca c

1438
1439
1440

FRET Probe 1

Set 4

r4A2 Probe
r4A2 Probe
r4A2 Probe
r4A2 Arrestor
r 4A2 Arrestor
r4A2 Invader
SRT

aac gag gcg cac aga agg ccc ctt gg-NH2
aac gag gcg cac aga agg ccc ctt
aac gag gcg cac aga agg ccc ctt - HEX
cca agg ggc ctt ctg tgc gc-NH2
aag ggg cct tct gtg cgc
cct tga aca gca cca gaa ata gac tga gca c

1441
1442
1443
1444
1445
1446

FRET Probe 1

Set 1

r4A3 Probe
r4A3 Arrestor
r4A3 Invader
SRT

aac gag gcg cac ttg aca gag tcc gc-NH2
gcg gac tct gtc aag tgc gc-NH2
gct tct ccc att tgt cta gca tta taa

1447
1448
1449

FRET Probe 1

Set 2

r4A3 Probe
r4A3 Arrestor
r4A3 Invader
r4A3 stacking oligo
SRT

aac gag gcg cac ttg aca gag tcc g-NH2
ggg act ctg tca agt ggc c-NH2
gct tct ccc att tgt cta gca tta taa
cca tga ttt tga cat agg gtt tga gga tg

1450
1451
1452
1453

FRET Probe 1

156

Set 3
 r4A3 Probe
 r4A3 Probe
 rCYP 4A3 Probe
 r4A3 Arrestor
 rCYP 4A3 Arrestor
 r4A3 Invader
 r4A3 stacking oligo
 SRT
 FRET Probe 1

aac gag gcg cac ttg aca gag tcc-NH2
 aac gag gcg cac ttg aca gag tcc
 aac gag gcg cac ttg aca gag tcc - HEX
 gga ctc tgt caa gtc cgc-NH2
 gga ctc tgt caa gtc cgc
 gct tct ccc att tgt cta gca tta taa
 gcc atg att ttg aca tag ggt ttg agg atg

Set 1
 r2B1 probe
 r2B1 invader
 Capture Sequence

cgg agc ctc tgc ggt cat caa g
 tgg ata act gca tca gtc tat ggc att tta a

Set 2/ Set 3
 r2B1 probe
 r2B1 probe
 r2B1 invader
 Capture Sequence

gtg-gcg-tat-ctg-cgg-tca-tca-ag
 gtg-gcg-tat-ctg-cgg-tca-tca-a
 tgg ata act gca tca gtc tat ggc att tta a

Set 4
 r2B1 probe
 r2B1 invader
 Capture Sequence

tg-gcg-tat-ctg-cgg-tca-tca-a
 tgg ata act gca tca gtc tat ggc att tta a

Set 5 - Set 7
 r2B1 probe
 r2B1 arrestor
 r2B1 arrestor
 r2B1 arrestor
 r2B1 invader
 SRT
 FRET

aac-gag-gcg-cac-ctg-cgg-tca-tca-a
 ttg-atg-acc-gca-ggt-gcg-cc-NH2
 ttg-atg-acc-gca-ggt-gcg-cc-Pi
 ttg-atg-acc-gca-ggt-gcg-cc-OH
 tgg ata act gca tca gtc tat ggc att tta a

Set 8
 r2B1 probe

aac-gag-gcg-cac-ctg-cgg-tca-tca-a

r2B1 arrestor
r2B1 invader
r2B1 stacker
SRT
FRET

ttg-atg-acc-gca-ggt-gcg-cc-Pi

tgg ata act gca tca gtg tat ggc att tta a
ggg ttg gta gcc tgt gtg agc cga t

1474
1475
1476

Set 9

r2B1 probe
r2B1 arrestor
r2B1 invader
SRT
FRET

aac-gag-gcg-cac-ctg-cgg-tca-tca-a-NH2

ttg-atg-acc-gca-ggt-gcg-NH2

tgg ata act gca tca gtg tat ggc att tta a

1477
1478
1479

Set 10

r2B1 probe
r2B1 arrestor
r2B1 invader
SRT
FRET

ggc-aac-gag-gca-cac-ctg-cgg-tca-tca-ag-Pi

ttg-atg-acc-gca-ggt-gcg-cc-Pi

tgg ata act gca tca gtg tat ggc att tta a

1480
1481
1482

Set 11

r2B1 probe
r2B1 arrestor
r2B1 invader
SRT
FRET

aac gag ggg cac ctg cgg tca tca ag-NH2

ctt gat gac cgc agg tgc c-NH2

tgg ata act gca tca gtg tat ggc att tta a

1483
1484
1485

Set 12

r2B1 probe
r2B1 arrestor
r2B1 invader
SRT
FRET

aac gag gcg cac ctg cgg tca tca agg-NH2

cct tga tga ccg cag gtg cg-NH2

tgg ata act gca tca gtg tat ggc att tta a

1486
1487
1488

Set 13

r2B1 probe
r2B1 arrestor
r2B1 invader
SRT
FRET

atg acg tga cag acc tgc ggt cat caa g-NH2

ctt gat gac cgc agg tct gt-NH2

tgg ata act gca tca gtg tat ggc att tta a

1489
1490
1491

1011

Set 14	aac gag gcg cac ctg agg tca tca a-NH2	1492
r2B1 probe	ttg atg acc tca ggt gcg-NH2	1493
r2B1 arrestor	tgg ata act gca tca ctg tat ggc att tta a	1494
r2B1 invader		
SRT		
FRET		
Set 15	cag tca cgt ctg ctg cgg tca tca ag-NH2	1495
r2B1 probe	cft gat gac cgc agg aga cg-NH2	1496
r2B1 arrestor	tgg ata act gca tca ctg tat ggc att tta a	1497
r2B1 invader		
SRT		
FRET		
Set 16	cag tca cgt ctg act gcg gtc atc aag-NH2	1498
r2B1 probe	gtg gat aac tgc atc agt gta tgg cat ttt c	1499
r2B1 invader	cft gat gac cgc agt gag acg-NH2	1500
r2B1 arrestor		
SRT		
FRET		
Set 17	cag tca cgt ctg act gcg gtc atc aa-NH2	1501
r2B1 probe	ttg atg acc gca gtc aga cg-NH2	1502
r2B1 arrestor	gtg gat aac tgc atc agt gta tgg cat ttt c	1503
r2B1 invader	ggg ttg gta gcc tgt gtg agc cga t	1504
r2B1 stacker		
SRT		
FRET		
Set 18	cag tca cgt ctg act gcg gtc atc a-NH2	1505
r2B1 probe	tga tga ccg cag tga gac g-NH2	1506
r2B1 arrestor	gtg gat aac tgc atc agt gta tgg cat ttt c	1507
r2B1 invader	agg gtt ggt agc ctg tgt gag ccg a	1508
r2B1 stacker		
SRT		
FRET		
Set 19	cag tca cgt ctg act gcg gtc atc aag-NH2	1509
r2B1 probe		

ctt gat gac cgc agt gag acg-NH2
 gfg gat aac tgc atc agt gta tgg cat ttt c
 ggt tgg tag cct gfg tga gcc gat c

r2B1 arrestor
 r2B1 invader
 r2B1 stacker
 SRT
 FRET

1510
 1511
 1512

cag tca cgt ctc act gcg gtc at-NH2
atg acc gca gfg aga cg-NH2
 gfg gat aac tgc atc agt gta tgg cat ttt c
 caa ggg ttg gta gcc tgt gfg agc c

Set 20
 r2B1 probe
 r2B1 arrestor
 r2B1 invader
 r2B1 stacker
 SRT
 FRET

1513
 1514
 1515
 1516

ccg tca cgc ctc act gcg gtc atc a-NH2
tga tga ccg cag tga gcc g-NH2
 gfg gat aac tgc atc agt gta tgg cat ttt c
 agg gtt ggt agc cfg tgt gag ccg a

Set 21
 r2B1 probe
 r2B1 arrestor
 r2B1 invader
 r2B1 stacker
 SRT
 FRET

1517
 1518
 1519
 1520

ccg tca cgc ctc act gcg gtc atc-NH2
gat gac cgc agt gag ccg-NH2
 gfg gat aac tgc atc agt gta tgg cat ttt c
 aag ggt tgg tag ccg gfg tg

Set 22
 r2B1 probe
 r2B1 arrestor
 r2B1 invader
 r2B1 stacker

1521
 1522
 1523
 1524

ccg tca cgc ctc act gcg gtc at-NH2
 ccg tca cgc ctc act gcg gtc at
atg acc gca gfg agg cg-NH2
 gfg gat aac tgc atc agt gta tgg cat ttt c
 caa ggg ttg gta gcc tgt gfg agc c

Set 23
 r2B1 probe
 r2B1 probe
 r2B1 arrestor
 r2B1 invader
 r2B1 stacker
 SRT
 FRET

1525
 1526
 1527
 1528
 1529

atg gfg tct ttg gfg act cfg tgt ggt aca
 aac-gag-gcg-cac-tcc-aat-agg-gac-aag

Set 1
 r2B1 invader
 r2B1 probe

1530
 1531

Set 4	aac-gag-gcg-cac-acc-aat-tgg-ggc-aag-Pi <u>ctt-gcc-cca-att-ggt-gtg-cgc-c-Pi</u> atg gfg tct ttg gtg act ctg tgt ggt aac	1552 1553 1554
r2B2 probe		
r2B2 arrestor		
r2B2 invader		
SRT		
FRET		
Set 5	<u>ctt gcc cca att ggt gtg cg-NH2</u> aac-gag-gcg-cac-acc-aat-tgg-ggc-aag-NH2 atg gfg tct ttg gtg act ctg tgt ggt aac atc tgc aaa tct ctg aat ctg gfg gat ga	1555 1556 1557 1558
r2B2 arrestor		
r2B2 probe		
r2B2 invader		
r2B2 stacker		
SRT		
FRET		
Set 6	ggc-aac-gag-gca-cac-aa-ttg-ggg-caa-g <u>ctt-gcc-cca-att-ggt-gtg-cgc-c-NH2</u> atg gfg tct ttg gtg act ctg tgt ggt aac	1559 1560 1561
r2B2 probe		
r2B2 arrestor		
r2B2 invader		
SRT		
FRET		
Set 7	aac gag gcg cac acc aat tgg ggc aag atc-NH2 <u>gat ctt gcc cca att ggt gtg cg-NH2</u> atg gfg tct ttg gtg act ctg tgt ggt aac	1562 1563 1564
r2B2 probe		
r2B2 arrestor		
r2B2 invader		
SRT		
FRET		
Set 8	aac gag gcg cac acc aat tgg ggc aag-NH2 <u>ctt gcc cga att ggt gtg cg-NH2</u> atg gfg tct ttg gtg act ctg tgt ggt aac atc tgc aaa tct ctg aat ctg gfg gat ga	1565 1566 1567 1568
r2B2 probe		
r2B2 arrestor		
r2B2 invader		
r2B2 stacker		
SRT		
FRET		
Set 9	cag tca cgt ctg atg gtg gcc tgt g-NH2	1569
r2B2 probe		

r2B2 invader
r2B2 arrestor
SRT
FRET

gta tgg cat ttt ggt acg atc aag ggc
cac agg cca cca tga gac g-NH2

1570
1571

Set 10

r2B2 probe
r2B2 invader
r2B2 arrestor
r2B2 stacker
SRT
FRET

cag tca cgt ctc aga gcc aat cac ctg-NH2
cga tca tca agg gat ggt ggc ctg tgc
cag gtc att ggc tct gag acg-NH2
atc aat ctc ctt ttg gac ttt ctc tgc g

1572
1573
1574
1575

Set 11

r2B2 probe
r2B2 invader
r2B2 arrestor
r2B2 stacker
SRT
FRET

cag tca cgt ctc aga gcc aat cac ct-NH2
cga tca tca agg gat ggt ggc ctg tgc
agg tga ttg gct ctg aga cg-NH2
gat caa tct cct ttt gga ctt tct ctg c

1576
1577
1578
1579

Set 12

r2B2 probe

FAM-cag tca cgt ctc aga gcc aat cac ct-NH2

1580

Set 13 / Set 14

r2B2 probe
r2B2 arrestor
r2B2 invader
r2B2 stacker
r2B2 stacker
SRT
FRET

cag tca cgt ctc aga gcc aat cac c-NH2
ggg gat tgg ctc tga gac g-NH2
cga tca tca agg gat ggt ggc ctg tgc
gat caa tct cct ttt gga ctt tct ctg c
tga tca atc tcc ttt tgg act ttc tct gc

1581
1582
1583
1584
1585

Set 15

r2B2 probe
r2B2 arrestor
r2B2 stacker
r2B2 invader
SRT
FRET

cag tca cgt ctc aga gcc aat cac-NH2
gtg att ggc tct gag acg-NH2
ctg atc aat ctc ctt ttg gac ttt ctc tgc g
cga tca tca agg gat ggt ggc ctg tgc

1586
1587
1588
1589

Set 16

cag tca cgt ctc aga gcc aat cac ct-NH2
agg tga ttg cct ctg aga cg-NH2
 cga tca tca agg gat ggt gcc ctg tgc
 gat caa tct cct ttg gga ctt tct ctg c

1590
 1591
 1592
 1593

SRT
 FRET

Set 17

cag tca cgt ctc aga gcc aat cac ctg-NH2
cag gtg att gcc tct gag acg-NH2
 cga tca tca agg gat ggt gcc ctg tgc
 atc aat ctc ctt ttg gac ttg ctc tgc g

1594
 1595
 1596
 1597

SRT
 FRET

Set 18

cag tca cgc ctc aga gcc aat cac ct-NH2
agg tga ttg gct ctg agg cg-NH2
 cga tca tca agg gat ggt gcc ctg tgc
 gat caa tct cct ttg gga ctt tct ctg c

1598
 1599
 1600
 1601

SRT
 FRET

Set 19

cag tca cgc ctc aga gcc aat cac c-NH2
ggt gat tgg ctc tga ggc g-NH2
 cga tca tca agg gat ggt gcc ctg tgc
 tga tca atc tcc ttg tgg act ttc tct gc

1602
 1603
 1604
 1605

SRT
 FRET

Set 20-21

ccg tca cgc ctc aga gcc aat cac-NH2
 ccg tca cgc ctc aga gcc aat cac
gtg att gcc tct gag gcg-NH2
 cga tca tca agg gat ggt gcc ctg tgc
ctg atc aat ctc ctt ttg gac ttg ctc tgc g

1606
 1607
 1608
 1609
 1610

r2B2 probe

r2B2 probe

r2B2 arrestor

r2B2 invader

r2B2 stacker

107/

Set 22

cag tca cgt ctc atg gtc aaa gta ctg tgg-NH2
gga agt gct cag gat tga agg tgt ctg gc
cca cag tac ttt gac cat gag acg-NH2

SRT
FRET

1611
1612
1613

Set 23

aac gag gcg cac atg gtc aaa gta ctg tgg-NH2
cca cag tac ttt gac cat gtc cgc-NH2
gga agt gct cag gat tga agg tgt ctg gc

SRT
FRET

1614
1615
1616

r2B2 probe
r2B2 invader

cat acg gtt ggg cct gtg aga gc
cat ttt ggt acg atc atc aag gga tgg tc

1617
1618

r3A1 probe
r3A1 probe
r3A1 invader
r3A1 probe
r3A1 probe
r3A1 arrestor
r3A1 probe
r3A1 probe
r3A1 arrestor
r3A1 arrestor
r3A1 arrestor
r3A1 arrestor
r3A1 arrestor
r3A1 arrestor
r3A1 arrestor
r3A1 arrestor
r3A1 arrestor

agg agc cac ggg tcc caa atc
FL-agg agc cac ggg tcc caa atc
tcc cct gtt tct tga aaa gtc cat gtg tga
F-tcg cgt agt cgg gtc cca aat c
cat-ctt-cgc-gga-cgg-gtc-cca-aat-c
gat-ttg-gga-ccc-ggt-gcg-cc-NH2
aac-gag-gcg-cac-cgg-gtc-cca-aat-c-NH2
cat-ctt-cgc-gga-cgg-gtc-cca-aat-c - NH2
gga ttt ggg acc cgt ccg cga - NH2
gga-ttt-ggg-acc-cgt-ccg-cg -NH2
gga ttt ggg acc cgt ccg c - NH2
gga ttt ggg acc cgt ccg - NH2
gat-ttg-gga-ccc-ggt-gcg-c-NH2
gat-ttg-gga-ccc-ggt-gcg-NH2
gat-ttg-gga-ccc-ggt-gc-NH2
gat-ttg-gga-ccc-ggt-gcg-cc-NH2
gat-ttg-gga-ccc-ggt-gcg-cct-c-NH2

1619
1620
1621
1622
1623
1624
1625
1626
1627
1628
1629
1630
1631
1632
1633
1634
1635

r3A1 probe
r3A1 probe
r3A1 probe

aac gag gcg cac cgg gtc cca aat c-Pi

1636

108/

r3A1 invader	tcc cct gtt tct tga aaa gtc cat gtc tga	1637
r3A1 probe	aac gag ggc cac cgg gtc cca aat c-NH2	1638
r3A1 arrestor	<u>gat ttg gga ccc ggt gcg</u> -NH2	1639
r3A1 probe	aac gag ggc cac cgg gtc cca aat c-NH2	1640
r3A1 arrestor	<u>gga ttt ggg acc cgg tgc gc</u> -NH2	1641
r3A1 probe	aac gag ggc cac cgg gtc cca aat-NH2	1642
r3A1 arrestor	<u>att tgg gac ccg gtc gcg</u> -NH2	1643
r3A1 stacker	ccg tag agg agc acc agg acg	1644
r3A1 probe	aac gag ggc cac cgg gtc cca aa-NH2	1645
r3A1 arrestor	<u>ttt ggg acc cgg tgc gc</u> -NH2	1646
r3A1 stacker	tcc gta gag gag cac cag ga	1647
r3A1 probe	cag tca cgt ctc cgg gtc cca aa-NH2	1648
r3A1 arrestor	<u>ttt ggg acc cgg aga cg</u> -NH2	1649
r3A1 stacker	<u>tcc gta gag gag cac cag ga</u>	1650
r3A1 probe	ccg tca cgc ctc cgg gtc cca aa-NH2	1651
r3A1 arrestor	<u>ttt ggg acc cgg agg cg</u> -NH2	1652
r3A1 stacker	<u>tcc gta gag gag cac cag ga</u>	1653
r3A1 stacker	<u>tcc gta gag gag cac cag ga</u>	1654
r3A1 probe	aac gag ggc cac cgg gtc cca-NH2	1655
r3A1 arrestor	<u>tgg gac ccg gtc gcg</u> -NH2	1656
r3A1 probe	ccg tca cgc ctc cgg gtc cca-NH2	1657
r3A1 arrestor	<u>tgg gac ccg gag gcg</u> -NH2	1658
r3A1 stacker	aat ccg tag agg agc acc agg	1659
r3A1 probe	aac gag ggc cac cgg gtc cca	1660

r3A2 invader	ttc ctt gtt tct taa aaa ttc cat gtc taa	1661
r3A2 invader	att ttt cga tac ttt tta tag cac tcc atc	1662
r3A2 probe	tgg cgt atc tgg gtt cca agt c	1663
r3A2 probe	aac gag ggc cac gtc aaa tct ccc taa	1664
r3A2 probe	aac-gag-gcg-cac-tgg-gtt-cca-agt-c	1665
r3A2 arrestor	<u>tta ggg aga ttt gac gtc gcg c</u> - NH2	1666
r3A2 arrestor	<u>gac-ttg-gaa-ccc-agt-gcg-cc</u> -NH2	1667
r3A2 probe	aac gag ggc cac tgg gtt cca agt c	1668
r3A2 probe	aac-gag-gcg-cac-tgg-gtt-cca-agt-c-Pi	1669
r3A2 arrestor	<u>gac ttg gaa ccc agt gcg</u> -NH2	1670
r3A2 probe	aac gag ggc cac tgg gtt cca agt cg-NH2	1671
r3A2 arrestor	<u>cga ctt gga acc cag tgc gc</u> -NH2	1672
r3A2 probe	aac gag ggc cac aac cat caa gtt cta ta-NH2	1673

r3A2 invader	gga atc gtc act act gac cct ttg ggt ata aac ac	1674
r3A2 stacker	tct ttt tta cag act ctc tca agt cta tta cc	1675
r3A2 arrestor	<u>tat aga act tga ttg tgc gc-NH2</u>	1676
r3A2 probe	aac gag gcg cac aac cat caa gtt cta-NH2	1677
r3A2 stacker	tat ctt ttt tac aga ctc tct caa gtc tat tac c	1678
r3A2 arrestor	<u>tag aac ttg atg gtt gtc gcg-NH2</u>	1679
r3A2 probe	cag tca cgt ctc ctc gcc agg gc-NH2	1680
r3A2 invader	cac aat atc gta ggt agg agg tgc ctt aa	1681
r3A2 arrestor	<u>gcc ctg ccg agg aga cg-NH2</u>	1682
r3A2 probe	cag tca cgt ctc ctc gcc agg g-NH2	1683
r3A2 stacker	ccc cat cga tct cct cct g	1684
r3A2 arrestor	<u>ccc tgc cga gga gac g-NH2</u>	1685
r3A2 probe	cag tca cgt ctc ctc gcc agg-NH2	1686
r3A2 stacker	gcc cca tgg atc tcc tcc	1687
r3A2 arrestor	<u>cct gcc gag gag acg-NH2</u>	1688
r3A2 probe	cag tca cgt ctc ctc gcc ag-NH2	1689
r3A2 stacker	ggc ccc atc gat ctc ctc	1690
r3A2 arrestor	<u>ctg ccg agg aga cg-NH2</u>	1691
r3A2 probe	ccg tca cgc ctc ctc gcc agg-NH2	1692
r3A2 arrestor	<u>cct gcc gag gag gcg-NH2</u>	1693
r3A2 stacker	<u>gcc cca tgg atc tcc tcc</u>	1694
r3A2 probe	ccg tca cgc ctc ctc gcc agg	1695
hICAM-1 probe	ccg tca cgc ctc gcc ttg tgt gtt c-NH2	1696
hICAM-1 invader	ccg gga tag gtt cag gga gcc gtc	1697
hICAM-1 stacker	<u>ggt ttc atg ggg gtc cct</u>	1698
hICAM-1 arrestor	<u>gaa cac aca agc cga gcc g</u>	1699
hVCAM-1 probe	ccg tca cgc ctc gcc ttt gtt tgg-NH2	1700
hVCAM-1 arrestor	<u>cca aac aaa gcc gag gcg</u>	1701
hVCAM-1 invader	ggg caa cat tga cat aaa gtg ttt gcg tac tct c	1702
hVCAM-1 stacker	<u>ggt cga att cca tgt cat c</u>	1703
hVCAM-1 probe	ccg tca cgc ctc gcc ttt gtt tg-NH2	1704
hVCAM-1 arrestor	<u>caa aca aag gcc agg cg</u>	1705
hVCAM-1 stacker	<u>ggt tgc aat tcc atg tca tc</u>	1706
hGAPDH probe	aac gag gcg cac gct cct gga aga tg-NH2	1707
hGAPDH arrestor	<u>cat ctt cca gga gcg tgc gcc-NH2</u>	1708

Oligo sequence descriptions:
 5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications are defined in (), ASR of primary probes are underlined
 C18ddC = C18 linker+dideoxy C, ddC = dideoxy C, FI = Fluorescein

Oligo Type	Oligo Sequence	SEQ ID NO
HUMAN IL-2		
Human IL-2 Probe	FI- CGAAATTAATACGCCCTTCTTGGGCATGTAC -C18ddC	1736
Human IL-2 Probe	CGAAATTAATACGCCCTTCTTGGGCATGTAC -C18ddC	1737
Human IL-2 Invader	CTGAAGATGTTTCAGTTCTGTG- ddC	1738
Human IL-2 Invader	GAAGATGTTTCAGTTCTGTGCG	1739
Human IL-2 Probe	TCACCTTCCTACCTTCTTGGGCATGTAA	1740
Human IL-2 Probe	TCACCTTCCTACCTTCTTGGGCATGTAAAC	1741
Human IL-2 Probe	TCACCTTCCTACCTTCTTGGGCATGTAA -C18ddC	1742
Human IL-2 Probe	GAAGATGTTTCAGTTCTGTG- ddC	1743
Human IL-2 Invader	FI- ACTTCCTACCTTCTTGGGCATGTAAAC	1744
Human IL-2 Probe	ACTTCCTACCTTCTTGGGCATGTAAAC - C18ddC	1745
Human IL-2 Probe	GAGTTTGGGATCTTGTAAATAT -ddC	1746
Human IL-2 Invader	FI- CGTGTCTGTGGCGTATCTTAAATTCATTCATAAATC	1747
Human IL-2 Probe	CGTGTCTGTGGCGTATCTTAAATTCATTCATAAATC	1748
Human IL-2 Probe	GAGTTTGGGATCTTGTAAATAT - ddC	1749
Human IL-2 Invader	FI- CGTGTCTGTGGCGTATCTTAAATTCATTCATAAATC	1750
Human IL-2 Probe	CGTGTCTGTGGCGTATCTTAAATTCATTCATAAATC	1751
Human IL-2 Probe	FI- CGTGTCTGTGGCGTATCTTAAATTCATTCATAAATC	1752
Human IL-2 Probe	CGTGTCTGTGGCGTATCTTAAATTCATTCATAAATC	1753
Human IL-2 Probe	GAGTTTGGGATCTTGTAAATAT -ddC	1754
HUMAN β-ACTIN		
Human β -actin Probe	FI-TTCCTACTCTTGAATCTTCTTCTG	1755
Human β -actin Invader	CTCAGGAGGAGCAATGATCTT	1756
Human β -actin Invader	CTCAGGAGGAGCAATGAT	1757
Human β -actin Probe	FI-TCACTTCTACTCTGGGTCATCTTCTG -C18ddC	1758
Human β -actin Probe	TCACCTTCCTACTCTGGGTCATCTTCTG -C18ddC	1759
Human β -actin Invader	GTGTTGAAGGTCCTCAACATGAT - ddC	1760
Human β -actin Invader	GGGTGTTGAAGGTCCTCAACATGAT - ddC	1761
Human β -actin Probe	FI- CGTGTCTGTGGCGTATCTTGGGTCATCTTCTG	1762
Human β -actin Probe	CGTGTCTGTGGCGTATCTTGGGTCATCTTCTG	1763
Human β -actin Invader	GGGTGTTGAAGGTCCTCAACATGAT - ddC	1764
GAPDH		
Human GAPDH Probe	FI- TTCATACGGTTGGTAGTTGAGGTCATG	1765
Human GAPDH Probe	TTCATACGGTTGGTAGTTGAGGTCATG	1766
Human GAPDH Invader	GGAATCATATTGGAACATGTAAACCATC	1767
Human GAPDH Probe	FI- TTCATACGGTTGGCTCCCTGGGAAGATG	1768

Human GAPDH Probe	TTCATACGGTTGGCTCTCCGGGAAGATG	1769
Human GAPDH Invader	CAC TTGATTTTGGAGGGAATCTCA	1770
Human/Mouse/Rat GAPDH Probe	TTCATACGGTTGGTAGTTGAGGTCAAIG	1771
Mouse/Rat GAPDH Invader	AGAATCATACTGGAACATGTAGACCATC	1772
Mouse GAPDH Probe	FI-TGGCGTATCAIGTAGTIIGA	1773
Mouse GAPDH Probe	TGGCGTATCAIGTAGTIIGA	1774
Mouse GAPDH Invader	GGAGTCATACTGGAACATGTAGACC	1775
Mouse GAPDH Probe	TGGCGTATCAIGTAGTIIGA	1776
Mouse GAPDH Invader	AGTCATACTGGAACATGTAGACA	1777
Mouse GAPDH Invader	GGAGTCATACTGGAACATGTAGACA	1778
MOUSE IL-6		
Mouse IL-6 Probe	FI- TGGCGTATCICITTTTICICATII	1779
Mouse IL-6 Probe	TGGCGTATCICITTTTICICATII	1780
Mouse IL-6 Invader	ACAATCAGAAATTGCCATTGCACAACA	1781
MOUSE ONCOSTATIN M		
Mouse Oncostatin M Probe	FI-GAAGGCAGAGGACCGTGAGGC	1782
Mouse Oncostatin M Probe	GAAGGCAGAGGACCGTGAGGC	1783
Mouse Oncostatin M Invader	AAGACATCTGGTGTGTAGTGA	1784
Mouse Oncostatin M Probe	FI-TGGCGTATCICCCAGAGAAAAGC	1785
Mouse Oncostatin M Probe	TGGCGTATCICCCAGAGAAAAGC	1786
Mouse Oncostatin M Invader	CACTGAGCCGATGAAGCGATGGTAA	1787
Mouse Oncostatin M Probe	FI- TGGCGTATCIAGGGCTCCCAAGAG	1788
Mouse Oncostatin M Probe	TGGCGTATCIAGGGCTCCCAAGAG	1789
Mouse Oncostatin M Invader	GTGTTCAAGTTTGGAGGCGGATAA	1790
Mouse Oncostatin M Probe	FI-TGGCGTATCIAGGGCTCCCAAG	1791
Mouse Oncostatin M Probe	TGGCGTATCIAGGGCTCCCAAG	1792
Mouse Oncostatin M Invader	GTGTTCAAGTTTGGAGGCGGATAA	1793
FRET Probe	FI-ATTC(CY3)TCTCAGAGA-3'NH2	1794
FRET Probe	FI-ATTC(CY3)TCTCAGAC-3'NH2	1795
FRET Probe	FI-ATTC(CY3)TCTCAGACT-3'NH2	1796
SRT	CAGTCTGAGATGAATGATACGCCCAGG-3'NH2	1797
Mouse Oncostatin M Arrestor	CTTGGAGCCCTAGATA -NH2	1798
Mouse Oncostatin M Arrestor	CTTGGAGCCCTAGAT -NH2	1799
Mouse Oncostatin M Arrestor	CTTGGAGCCCTAGA -NH2	1800
Mouse Oncostatin M Probe	CTGGCGTATCIAGGGCTCCCA	1801
Mouse Oncostatin M Probe	CCTGGCGTATCIAGGGCTCCCA	1802
Mouse Oncostatin M Invader	GTGTTCAAGTTTGGAGGCGGATAA	1803
SRT	CAGTCTGAGATGAATGATACGCCCAGG-3'NH2	1804
Arrestor	CTTGGAGCCCTAGAT -NH2	1805
Mouse Oncostatin M Probe	FI-CTCTCTCGTCTCTAGGGCTCCCA	1806

Mouse Oncostatin M Probe	CTCTCTCGTCTCTAGGGCTCCCA	1807
Mouse Oncostatin M Invader	GTGTTTCAGGTTTGGAGCGGATAA	1808
SRT	CAGTCTGAGATGAATGAGACGAGAGAGI-NH2	1809
Mouse Oncostatin M Arrestor	CTTGAGCCCTAGAG-NH2	1810
Mouse Oncostatin M Probe	FI- TGCGGTATCTAGGGCTCCCA	1811
Mouse Oncostatin M Probe	TGGCGTATCTAGGGCTCCCA	1812
Mouse Oncostatin M Invader	GTGTTTCAGGTTTGGAGCGGATAA	1813
Mouse Oncostatin M Probe	TGGCGTATCTCCCGCAGAGAA	1814
Mouse Oncostatin M Probe	TGGCGTATCTCCCGCAGAGA	1815
Mouse Oncostatin M Invader	CAGTGAGCCGATGAAGCGATGGTAA	1816
Mouse Oncostatin M Probe	TGGCGTATCTATAGGGCTC	1817
Mouse Oncostatin M Invader	GTGTTTCAGGTTTGGAGCGGAA	1818
Mouse Oncostatin M Probe	CTCTCTCGTCTCTCAGGTTTGG	1819
Mouse Oncostatin M Probe	GGCAGCTCTCAGGTCAGGTGTGA	1820
Mouse Oncostatin M Invader	AGGCAGCTCTCAGGTCAGGTGTGA	1821
Mouse Oncostatin M Invader	CAGTCTGAGATGAATGAGACGAGAGAGI-NH2	1822
SRT	FI-ATTC(CY3)TCTCAGAC-3'NH2	1823
FRET Probe	CAAAACCTGAAGAGA-3'NH2	1824
Mouse Oncostatin M Arrestor	CAAAACCTGAAGAGAC-3'NH2	1825
Mouse Oncostatin M Arrestor	CAAAACCTGAAGAGACG-3'NH2	1826
Mouse Oncostatin M Probe	FI- CTCTCTCGTCTCTCAGGTTTGG	1827
Mouse Oncostatin M Probe	CTCTCTCGTCTCTCAGGTTTGG-NH2	1828
Mouse Oncostatin M Invader	GGCAGCTCTCAGGTCAGGTGTGA	1829
Mouse Oncostatin M Stack	GAGCGGATATAGGGCT- Biotin TEG	1830
HUMAN ONCOSTATIN M		
Human Oncostatin M Probe	CTCTCTCGTCTCTCAGGACITTA	1831
Human Oncostatin M Probe	CTCTCTCGTCTCTCAGGACITTA	1832
Human Oncostatin M Invader	GAAACAGGAGTGCAGGACACAGACA	1833
Human Oncostatin M Probe	TCACGTCTCTCAGGTTTGG	1834
Human Oncostatin M Probe	GTCACGTCTCTCAGGTTTGG	1835
Human Oncostatin M Probe	AGTCACGTCTCTCAGGTTTGG	1836
Human Oncostatin M Probe	CAGTCACGTCTCTCAGGTTTGG	1837
Human Oncostatin M Invader	AGGCAGCTCTCAGGTCAGGTGTGA	1838
FRET Probe 1	FI- CAAC(CY3)GCTTCTCTCCG	1839
SRT	CGGAGGAAGCAGTTGGAGACGTGACTGIGG-NH2	1840
SRT with mismatch	CGGAAGAAAGCAGTTGGAGACGTGACTGIGG-NH2	1841
SRT with mismatch	CGGACGAAGCAGTTGGAGACGTGACTGIGG-NH2	1842

bold indicates 2' o-methyl bases

Oligo Type	Oligo Sequence	Oligo #	SEQ ID NO
SECONDARY SYSTEM:			
SET 1			
FRET probe 1	5'-F-CAAC(CY3)GCTTCCTCCG-3'	DB04001F6	1843
secondary target	5'-CGGAAGAAGCAGTTGGTGGCGCTCGTTAA-NH2	649-10-01	1844
SET 2			
FRET probe 1	5'-F-CAAC(CY3)GCTTCCTCCG-3'	DB04001F6	1845
secondary target	5'-CGGAAGAAGCAGTTGGAGGCGTGACGGT-NH2-3'	641-60-03	1846
<hr/>			
h2C19 designs 2			
probe	5'-AACGAGGGCAGCATGTCCATCGA-NH2-3'	971-26-09	1847
stacker	5'-TTCTTGGTGTCTTTACTTCTC-3'	971-26-12	1848
invader	5'-GCAATCAATAAAGTCCCGAGGGTTGTTT	971-26-11	1849
arrestor	5'-TCGATGGACATCGTGCCG-3'	971-26-10	1850
SET 1			
h 2D6 p450 designs			
probe	5'-CCGTACGCCCTCTCACCCTCT-NH2-3'	971-11-01	1851
stacker	5'-CTGGTCGCCGCACCT-3'	971-11-04	1852
invader	5'-TGTAGGGCATGTGAGCCTGGA-3'	971-11-03	1853
arrestor	5'-AGATGGGAGAGAGGCG-3'	971-11-02	1854
SET 2			
probe	5'-CCGTACGCCCTCGAAGCCCTGT-NH2-3'	971-11-05	1855
stacker	5'-ACTTCGATGTACGGGATGTCATATGG-3'	971-11-08	1856
invader	5'-GAGTGTGTTCCCTTAGGGATGCCG-3'	971-11-08	1857
arrestor	5'-ACAGGGCTTCGAGGCG-3'	971-11-06	1858
SET 2			
probe	5'-CCGTACGCCCTCCCTGTGAGAAAG-NH2-3'	971-11-09	1859
stacker	5'-GCAGGAAGGCCTCCG-3'	971-11-12	1860
invader	5'-CCCGAGGCATGCACGGCGGA-3'	971-11-11	1861
arrestor	5'-CTTTCTCAGCAGGGAGGCG-3'	971-11-10	1862
SET 2			

1151

h 2D6 shroter designs

probe	5'-CCGTCACGCCCTCCCTGCTGAGAAA-HEX-3'	1051-12-06	1863
probe	5'-CCGTCACGCCCTCCCTGCTGAGAAA-3'	1051-12-05	1864
probe	5'-CCGTCACGCCCTCCCTGCTGAGAAA-NH2-3'	971-38-01	1865
invader	5'-CCCGAGGCATGCACGGCGGA-3'	971-11-11	1866
stacker	5'-GGCAGGAAGGCCTCC-3'	971-38-03	1867
arrestor	5'-TTTCTCAGCAGGGAGGCG-3'	971-38-02	1868
SET 2			
probe	5'-CCGTCACGCCCTCCCTGCTGAGA-NH2-3'	971-38-07	1869
invader		971-11-11	
stacker	5'-AAGGCAGGAAGGCCTCC-3'	971-38-09	1870
arrestor	5'-TCTCAGCAGGGAGGCG-3'	971-38-08	1871
SET 2			
probe	5'-CCGTCACGCCCTCCCTGCTGAGAA-NH2-3'	971-38-04	1872
invader		971-11-11	
stacker	5'-AGGCAGGAAGGCCTGG-3'	971-38-06	1873
arrestor	5'-TTCTCAGCAGGGAGGCG-3'	971-38-05	1874
SET 2			
probe	5'-CCGTCACGCCCTCCCTGCTGAGAAAG-NH2-3'	971-11-09	1875
invader		971-11-11	
stacker	5'-GCAGGAAGGCCTCCG-3'	971-11-12	1876
arrestor	5'-CTTTCTCAGCAGGGAGGCG-3'	971-11-10	1877
SET 2			
h 2B6 p450 alt. Splice designs			
probe	5'-AACGAGGGCGCACCATATCCC-NH2-3'	1051-48-01	1878
invader	5'-CCAGCGGTTTCCATTGGCAAAGATCAA-3'	971-01-03	1879
stacker	5'-CGGAAGAATGGGTCGACCATG-3'	971-01-04	1880
arrestor	5'-GGGATATGGTGTCGCG-3'	1051-48-02	1881
SET 1			
probe	5'-CCGTCACGCCCTCCACCATATCCC-HEX-3'	1051-12-02	1882
probe	5'-CCGTCACGCCCTCCACCATATCCC-3'	1051-12-01	1883
probe	5'-CCGTCACGCCCTCCACCATATCCC-NH2-3'	971-01-01	1884
invader		971-01-03	
stacker		971-01-04	
arrestor	5'-GGGATATGGTGAGGCG-3'	971-01-02	1885

SET 2

probe
invader
stacker
arrestor
SET 1

5'-AACGAGGCGCACCAGAGCTGATGAG-NH2-3'
5'-GAGAAGAGCTCAACACAGCTGGCCGAATAA-3'
5'-TGAAAAAGTCTGGTAGAACAAAGTTCAGC-3'
5'-CTCATCAGCTCTGGTGCGC-3'

probe

5'-CCGTCACGCCTCCAGAGCTGATGAG-NH2-3'
5'-CTCATCAGCTCTGGAGGCG-3'

SET 2

h 2B6 p450 alt.splice designs2

p
l
s
a
SET 1

5'-AACGAGGCGCACCCTTGGATTC-NH2-3'
5'-CTGTTCAATCTCCCTGTAGACTCTCTA-3'
5'-CGAAGCTCCTCTATCAG-3'
5'-GAAATCCAAGGTGCGC-3'

p
l
s
a
SET 2

5'-CCGTCACGCCTCCCTTGGATTC-NH2-3'
5'-GAAATCCAAGGAGGCG-3'

p
l
s
a
SET 1

5'-AACGAGGCGCACTGAGGGCC-NH2-3'
5'-GGAAGAGGAAGGTGGGTCCAA-3'
5'-CCCTTGGATTTCCGAAG-3'
5'-GGCCCTCAGTGCGC-3'

p
l
s
a
SET 2

5'-CCGTCACGCCTCTGAGGGCC-NH2-3'
5'-GGCCCTCAGAGGCG-3'

h2B6 p450 alt. Splice designs4

117

209230 "5'3'300"

probe	5'-AACGAGGGCGCACAAATACAGAGCTG-NH2-3'	1051-48-17	1904
invader	5'-GAGAAGAGCTCAAACAGCTGGCCGC-3'	1051-48-22	1905
stacker	5'-ATGAGTGAAAAAGTCTGGTAGAAC-3'	1051-48-21	1906
arrestor	5'-CAGCTCTGTATTGTGCGC-3'	1051-48-18	1907
SET 1			

probe	5'-CCGTCACGCCTCAATACAGAGCTG-NH2-3'	1051-48-19	1908
invader		1051-48-22	
stacker		1051-48-21	
arrestor	5'-CAGCTCTGTATTGAGGCG-3'	1051-48-20	1909
SET 2			

probe	5'-AACGAGGGCGCACGGTTGAGGTTCTG-NH2-3'	1051-48-23	1910
invader	5'-CAGCAAAGAAAGAGCGAGCGTGTGAC-3'	1051-48-28	1911
stacker	5'-GTGGCTGAATTCACGTG-3'	1051-48-27	1912
arrestor	5'-CAGAACCCTCAACCGTGCGC-3'	1051-48-24	1913
SET 1			

probe	5'-CCGTCACGCCTCGGTTGAGGTTCTG-NH2-3'	1051-48-25	1914
invader		1051-48-28	
stacker		1051-48-27	
arrestor	5'-CAGAACCTCAACCGAGGCG-3'	1051-48-26	1915
SET 2			

h2B6 p450 designs

probe	5'-CCGTCACGCCTCCACCATATCCCCG-NH2-3'	971-01-06	1916
invader	5'-CCGTCACGCCTCCACCATATCCC-NH2-3'	971-01-03	1917
stacker	5'-CGGAAGAATGGTCGAC-3'	971-01-05	1918
stacker	5'-CGGAAGAATGGTCGACCATG-3'	971-01-04	1919
arrestor	5'-GGGATATGGTGGAGGCG-3'	971-01-02	1920
SET 2			

probe	5'-CCAGCGGTTTCCATTGGCAAAGATCAA-3'	971-01-01	1921
invader		971-01-03	
arrestor	5'-CGGGGATATGGTGGAGGCG-3'	971-01-07	1922
SET 2			

118

probe	5'-CCGTCACGCCTCCAGAGCTGATGAG-NH2-3'	971-01-08	1923
invader	5'-GAGAAGAGCTCAAACAGCTGGCCGAATAA-3'	971-01-10	1924
stacker	5'-TGAAAAAGTCTGTTAGAACAAAGTTCAGC-3'	971-01-11	1925

209220 "64243001"
5'-CTCATCAGCTCTGGAGGCG-3' 971-01-09

1926

arrestor
SET 2

h2b6p450 designs 2

probe
invader
stacker
arrestor
SET 2

5'-CCGTCACGCCTCAGATGACTGCC-NH2-3'
5'-GGAGAAAGTCGGAAAATCTCTGAATCTCATC-3'
5'-TCTGTGTATGGCATTGCTCGG-3'
5'-GGCAGTCATCTGAGGCG-3'

1927
1928
1929
1930

h 2C19 designs 1

probe
invader
stacker
arrestor
SET 2

5'-CCGTCACGCCTCCATCCTTAATATCTAT-NH2-3'
5'-GAGAGATTGGTTAAGGATTTGCTGAA-3'
5'-CTGTAGGATATTTCCAATCACTGGG-3'
5'-ATAGATATTAAGGATGGAGGCG-3'

1931
1932
1933
1934

probe
invader
stacker
arrestor
SET 1

5'-AACGAGGGCGCACCGTTCAGGC-NH2-3'
5'-CATATCCATGCAGCACCAACCATGA-3'
5'-CAAAATACAGAGTGAACACAGGGCC-3'
5'-GCCTGGAACGGTGCGC-3'

1935
1936
1937
1938

h2C19 shorter site 2 designs

probe
invader
stacker
arrestor
SET 1

5'-AACGAGGGCGCACCGTTCAGGC-NH2-3'
5'-CATATCCATGCAGCACCAACCATGA-3'
5'-CCAAAATACAGAGTGAACACAGGGCC-3'
5'-CCTGGAACGGTGCGC-3'

1939
1940
1941
1942

probe
probe
probe
invader
stacker
arrestor
SET 1

5'-AACGAGGGCGCACCGTTCAGGC-NH2-3'
5'-AACGAGGGCGCACCGTTCAGGC-3'
5'-AACGAGGGCGCACCGTTCAGGC-HEX-3'
5'-CAAAATACAGAGTGAACACAGGGCC-3'
5'-GCCTGGAACGGTGCGC-3'

1943
1944
1945
1946
1947

rat 1A1, rat 1A2
probe

Rat 1A1 site 1 bs. 639-700
5'-CCGTCACGCCTCAGATTGACTATGCTG-NH2-3'

1948

500-58-01

1191

invader	5'-CAGTAACCTCCCCAACTCATTGCTTC-3'	500-58-03	1949
stacker	5'-AGCAGCTCTTGTCATCGT-3'	500-58-04	1950
arrestor	5'-CAGCATAGTCAATCTGAGGCG-3'	500-58-02	1951
SET 2			
rat 1A2			
probe	Rat 1A2 site 1 bs. 674-725		
invader	5'-AACGAGGCGCACTGACATTCTCCAC-NH2-3'	500-58-05	1952
stacker	5'-GTCCACAGCATTCCCTGAGGA-3'	500-58-07	1953
arrestor	5'-AAAGTCCTTGCTGCTCTTC-3'	500-58-08	1954
SET 1	5'-GTGGAGAAATGTCAGTGCGGC-3'	500-53-06	1955
rat 2B1-2B2 patent			
probe	5'-AACGAGGCGCACTGGCTTGACACA-NH2-3'	500-49-05	1956
invader	5'-GTCAATGTCCCTGGGAGCCAAAA-3'	500-49-03	1957
stacker	5'-GAGAAAGTTCTGGAGGATGGTGG-3'	r2B1, 2B2 500-49-07	1958
arrestor	5'-TGTGTCAAGCCAGTGCGGC-3'	500-49-06	1959
SET 1			
probe	5'-AACGAGGCGCACTGGCTTGACACAG-NH2-3'	500-49-01	1960
invader		500-49-03	
stacker	5'-AGAAAGTTCTGGAGGATGGTGG-3'	r2B1, 2B2 500-49-04	1961
arrestor	5'-CTGTGTCAAGCCAGTGCGGC-3'	500-49-02	1962
SET 1			
rat 2B1-2B2 site 4			
probe	PROBE SET 2 (r2B1 bs 1299-1353, r2B2 bs. 474-528)		
invader	5'-AACGAGGCGCACGAGGAACAATTCATTT-NH2-3'	500-49-12	1963
stacker	5'-GTTCTGGAGGATGGTGAAGAAC-3'	500-49-10	1964
arrestor	5'-CGGGCAATGCCCTTCG-3'	500-49-14	1965
SET 2	5'-AAATGAATTGTTCTCGTGCGGC-3'	500-49-13	1966
probe			
invader	5'-AACGAGGCGCACGAGGAACAATTCATTT-NH2-3'	500-49-08	1967
stacker	5'-GGGCAATGCCCTTCG-3'	500-49-10	1968
arrestor	5'-GAAATGAATTGTTCTCGTGCGGC-3'	500-49-11	1969
SET 1		500-49-09	
rat 2B1-2B2 ,5 patent			
probe	5'-AACGAGGCGCACAGCTGAGAAAGCAG-NH2-3'	500-49-15	1970

invader	5'-GCCTCAGCCGGATCACCGC-3'	r2B1, 500-49-17	1971
invader	5'-GCCTCAGCCGGATCACCGC-3'	r2B2, 500-49-18	1972
stacker	5'-ATCTGGTACGTTGGAGGTATT-3'	r2B1 500-49-20	1973
stacker	5'-ATCTGGTATGTTGGAGGTATT-3'	r2B2 500-49-21	1974
arrestor	5'-CTGCTTCTCAGCTCTGCCG-3'	500-49-16	1975

NOTE: all 3 invader/probe sets are designed to detect both 2B1 and 2B2

SET 1

rat 2E1 p450 (af061442) 500-73 Rat 2E1 PROBE SET (570C)

p	5'-CCGTCACGCCCTCGTAAACGTTTGT-NH2	500-40-04	1976
i	5'-CCTCAGACACTTCTTGTCATTGTAC-3'	500-40-02	1977
s	5'-GAAGAGGATATCCGCAATGACATTGC-3'	500-40-05	1978
a	5'-AACAAACGTTTTCGACGAGGCG-3'	500-40-06	1979

SET 2

p 5'-CCGTCACGCCCTCGTAAACGTTTGTGAAG-NH2-3'

i	500-40-01	1980
s	500-40-02	
a	500-40-05	
	500-40-03	1981

SET 2

rat 2E1 p450 (af061442) 500-73 Rat 2E1 PROBE SET (822G) (designed over splice junction #5)

p	5'-CCGTCACGCCCTCTCCATCTCTATG-NH2-3'	500-40-10	1982
i	5'-GTTCTTGGCTGTGTTTTCCCTTA-3'	500-40-08	1983
s	5'-AGGAGACAGTCAGTCACATC-3'	500-40-11	1984
a	5'-CATAGAGATGGAGGAGGCG-3'	500-40-12	1985

SET 2

p 5'-CCGTCACGCCCTCTCCATCTCTATGAG-NH2-3'

i	500-40-07	1986
s	500-40-08	
a	500-40-11	
	500-40-09	1987

SET 2

Rat 2E1 PROBE SET (969G)

probe Designed over splice junction #6

invader	5'-CCGTCACGCCCTCTCTTCAATTTCTG-HEX-3'	1073-19-06	1988
stacker	5'-CCCTGTCAATTTCTTCATGAAGTTTA-3'	500-40-14	1989
arrestor	5'-GGTATTTTCATGAGGATCAGGAGC-3'	500-40-17	1990
	5'-CCAGAAATTGAAGAGGAGGCG-3'	500-40-15	1991

SET 2

121

2009-2014 "BEBB"

probe	5'-CCGTCACGCCCTCCTCTTCAATTTCTG-3'	1073-19-05	1992
probe	5'-CCGTCACGCCCTCCTCTTCAATTTCTG-NH2-3'	500-40-16	1993
probe	5'-CCGTCACGCCCTCCTCTTCAATTTCTGG-NH2	500-40-13	1994
invader		500-40-14	
stacker		500-40-17	1995
arrestor		500-40-18	
SET 2	5'-CAGAAATTGAAGAGGAGGCG-3'		
Rat 2E1 PROBE SET (969G)	Designed over splice junction #6		
probe	5'-CCGTCACGCCCTCCTCTTCAATTTCT-NH2-3'	500-73-01	1996
invader	5'-CCCTGTCAATTTCTTCATGAAGTTTA-3'	500-40-14	1997
stacker	5'-GGGTATTTTCATGAGGATCAGGAG-3'	500-73-03	1998
arrestor	5'-AGAAATTGAAGAGGAGGCG-3'	500-73-02	1999
SET 2			
rat 3A's design 2			
probe	5'-CCGTCACGCCCTCGTTCCCTGGGT-NH2-3'	500-43-15	2000
invader	5'-GAGCAAAACCTCATGCCAATGCAC-3'	r3A1, 3A18 500-43-23	2001
invader	5'-GAGCAAAACCTCATGTCAATGCAC-3'	r3A2 500-43-24	2002
invader	5'-GAGCAAAACCTCATGCCAATACAC-3'	r3A2 500-43-24	2003
stacker	5'-CCATTTCCAAAGGCGAG-3'	short r3A1, 3A2, 3A18 500-43-19	2004
stacker	5'-CCATTTCCAAAGGCGAG-3'	short r3A9 500-43-20	2005
arrestor	5'-ACCCAGGAACGAGGCG-3'	500-43-16	2006
SET 2			
probe	5'-CCGTCACGCCCTCGTTCCCTGGGT-NH2-3'	500-43-13	2007
invader		r3A1, 3A18 500-43-23	
invader		r3A2 500-43-24	
arrestor		500-43-14	2008
SET 2	5'-GACCCAGGAACGAGGCG-3'		
rat 3A's desing 3			
probe	5'-CCGTCACGCCCTCTGAGAGCAAAACCT-NH2-3'	500-43-29	2009
invader	5'-AGAGCGAGTTTCATATTCAA-3'	r3A1, 3A2 500-43-35	2010
invader	5'-AGAGCAACTTTCATGTTCAA-3'	r3A9 500-43-36	2011
invader	5'-ACAGCAAGTTTCATGCTGAA-3'	r3A18 500-43-37	2012
stacker	5'-CATGCCAATGCAGTTCCTG-3'	r3A1, 3A18 500-43-31	2013
stacker	5'-CATGTCAATGCAGTTCCTG-3'	r3A2 500-43-32	2014
stacker	5'-CATGCCAATACAGTTCCTG-3'	r3A9 500-43-33	2015

1221

arrestor SET 2	5'-AGGTTTGCTCTCCGAGGCG-3'	500-43-30	2016
probe invader invader invader arrestor SET 2	5'-CCGTCACGCCTCTGAGAGCAAACCTCA-NH2-3'	500-43-27 r3A1, 3A2 500-43-35 r3A9 500-43-36 r3A18 500-43-37 500-43-28	2017
	5'-TGAGGTTTGCTCTCAGAGGCG-3'		2018
rat 3A's designs			
probe	5'-CCGTCACGCCTCGGAACATCTCCT-NH2-3'	500-43-03	2019
invader	5'-TGCTCCATACTGTTCAATGATGGC-3'	r3A1, 3A2 500-43-09	2020
invader	5'-TATCTGTATACTGGTTAATGATGGC-3'	r3A9 500-43-10	2021
invader	5'-TATCTCCATACTGTCTCATGAGGGC-3'	r3A18 500-43-11	2022
s	5'-TGAGTCTTCCACTGGTG-3'	r3A1, 3A2 500-43-05	2023
s	5'-TGAGCTTCCCACTGGTG-3'	r3A9 500-43-06	2024
a	5'-TGAGTTGCCACTGGTG-3'	r3A18 500-43-07	2025
SET 2			
probe	5'-CCGTCACGCCTCGGAACATCTCCTTGA-NH2-3'	500-43-01	2026
invader		r3A1, 3A2 500-43-09	
invader		r3A9 500-43-10	
invader		r3A18 500-43-11	
arrestor SET 2	5'-TCAAGGAGATGTTCCGAGGCG-3'	500-43-02	2027
rat 3A's design 2b			
probe	5'-CCGTCACGCCTCGTTCTGGG-NH2-3'	991-39-01	2028
invader	5'-GAGCAAAACCTCATGCCAATGCAC-3'	r3A1, 3A18 500-43-23	2029
invader	5'-GAGCAAAACCTCATGTCAATGCAC-3'	r3A2 500-43-24	2030
invader	5'-GAGCAAAACCTCATGCCAATACAC-3'	r3A9 500-43-25	2031
stacker	5'-TCCATTTCCAAAGGCGAG-3'	r3A1, 3A2, 3A18 991-39-03	2032
stacker	5'-TCCATTTCCAAAGGCGAG-3'	r3A9 991-39-04	2033
arrestor SET 2	5'-CCCAGGAACGAGGCG-3'	991-39-02	2034
rat or human 1A1 shorter site 2			
probe	5'-CCGTCACGCCTCCTGTCTGTGAT-HEX-3'	1073-19-02	2035
probe	5'-CCGTCACGCCTCCTGTCTGTGAT-3'	1073-19-01	2036

209270" 554200

probe	5'-CCGTCACGCCTCCTGTCTGTGAT-NH2-3'	991-12-04	2037
invader	5'-TCCTGACAAATGCTCAATGAGGA-3'	r 1A1 500-53-11	2038
invader	5'-TCCTGACAGTGCTCAATCAGGA-3'	h 1A1 500-53-12	2039
stacker	5' -GTCCCGGATGTGGCCC-3'	rat/human 1A1 991-12-06	2040
arrestor	5'-ACATCACAGACAGGAGGCG-3'	500-53-10	2041
SET 2			

probe	5'-CCGTCACGCCTCCTGTCTGTGATG-NH2-3'	991-12-01	2042
invader		r 1A1 500-53-11	
invader		h 1A1 500-53-12	
stacker	5'-TCCCGGATGTGGCCCT-3'	rat/human 1A1 991-12-03	2043
arrestor	5'-CATCACAGACAGGAGGCG-3'	991-12-02	2044
SET 2			

probe	5'-CCGTCACGCCTCCTGTCTGTGATGT-NH2-3'	500-53-09	2045
invader		r 1A1 500-53-11	
invader		h 1A1 500-53-12	
stacker	5'-GTCCCGGATGTGGCCC-3'	rat/human 1A1 991-12-06	2046
arrestor	5'-ATCACAGACAGGAGGCG-3'	991-12-05	2047
SET 2			

rat or human 1A1 site 1

probe	5'-CCGTCACGCCTCTGGCCCTTC-NH2-3'	500-53-04	2048
invader	5'-CTGTCTGTGATGTCGGGATGA-3'	500-53-03	2049
stacker	5' -TCAAATGTCCTGTAGTGCTC- 3'	rat 1A1 500-53-06	2050
stacker	5' -TCAAAGGTTTTGTAGTGCTC- 3'	human 1A1 500-53-07	2051
arrestor	5'-GAAGGCCAGAGGCG-3'	500-53-05	2052
SET 2			

probe	5'-CCGTCACGCCTCTGGCCCTTCTC-NH2-3'	500-53-01	2053
invader		500-53-03	
arrestor	5'-GAGAAAGGCCAGAGGCG-3'	500-53-02	2054
SET 2			

Rat/Human 1A1 site 2

probe	5'-CCGTCACGCCTCCTGTCTGTGATGT-NH2-3'	500-53-09	2055
invader	5'-TCCTGACAAATGCTCAATGAGGA-3'	r 1A1 500-53-11	2056
invader	5'-TCCTGACAGTGCTCAATCAGGA-3'	h 1A1 500-53-12	2057
stacker	5'-CCCGGATGTGGCCCT-3'	rat/human 1A1 500-53-14	2058
arrestor	5'-ACATCACAGACAGGAGGCG-3'	500-53-10	2059

124

SET 2

rat or human 1A2 sites

probe	5'-AACGAGGCGCAGGACTGTTTTCTGC-HEX-3'	1073-19-04	2060
probe	5'-AACGAGGCGCAGGACTGTTTTCTGC-3'	1073-19-03	2061
probe	5'-AACGAGGCGCAGGACTGTTTTCTGC-NH2-3'	500-53-15	2062
invader	5'-CTTGTTGAAGTCTTGATAGTGTTCCTC-3'	rat 1A2 500-53-17	2063
invader	5'-CTTGTCAAAAGTCTGATAGTGCTCCTC-3'	human 1A2 500-53-18	2064
arrestor	5'-GCAGAAACAGTCCGTGCGC-3'	500-53-16	2065
SET 1			

shorter h2C19 design site 3

probe	5'-AACGAGGCGCAGGATGTCCATCG-NH2-3'	971-48-01	2066
invader	5'-GCAATCAATAAAGTCCCGAGGGTTGTTTC-3'	971-26-11	2067
stacker	5'-ATTCTGGTGTCTTTTACTTTCTC-3'	971-48-03	2068
arrestor	5'-CGATGGACATCGTGCGC-3'	971-48-02	2069
SET 1			

Human IL-10

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	SEQ ID NO
probe	aacgaggcgccaccaaacctcactcatgct-NH2	511-31-01	FV-1 & FV-2	3' amine	2070
arrestor	agccatgagtgattggtgcg	511-31-02		All 2'Ome + 3' amine arrestor for 511-31-01	2071
probe	aacgaggcgccaccaaacctcactcatggc-NH2	511-30-01	FV-1 & FV-2	3' amine	2072
arrestor	gccatgagtgattggtgcg	511-30-02		All 2'Ome + 3' amine arrestor for 511-30-01	2073
arrestor	gccatgagtgattggtgcg	380-89-02		All 2'Ome Same as 380-82-02	2074
arrestor	gccatgagtgattggtgcg	380-89-04		All 2'Ome Same as 380-82-04	2075
arrestor	gccatgagtgattggtgcg	380-89-06		All 2'Ome Same as 380-82-06	2076
arrestor	gccatgagtgattggtgcg	380-89-08		All 2'Ome Same as 380-82-08	2077
probe	aacgaggcgccaccaaacctcactcatg-NH2	511-67-01	FV-1 & FV-2	3' amine	2078
stacker	cttctgacatgcctctctctggagc	781-79-01		stacker for 511-67-01 All 2'Ome	2079
arrestor	ccatgagtgattggtgcg	781-79-02	FV-1 & FV-2	all 2'Ome arrestor for 511-67-01	2080
probe	aacgaggcgccaccaaacctcactcatg-NH2	781-80-01		3' amine	2081
stacker	gccttgacatgcctctctctggag	781-80-02		stacker for 781-80-01 All 2'Ome	2082
arrestor	catgagtgattggtgcg	781-80-03	FV-1 & FV-2	all 2'Ome arrestor for 781-80-01	2083
probe	aacgaggcgccaccaaacctcactcat-NH2	781-81-01		3' amine	2084
stacker	ggctttgacatgcctctctctgga	781-81-02		stacker for 781-81-01 All 2'Ome	2085
stacker	ggctttgacatgcctctctctgga	938-74-01		stacker for 781-81-01 All 2'Ome to replace 781-81-02	2086
arrestor	atgagtgattggtgcg	781-81-03		all 2'Ome arrestor for 781-81-01	2087
probe	cogtcacgcctccaaactcactcat-NH2	938-46-02	MO4-1/MO4-2/MO4-3	same as 938-46-01 w/ 3' amine	2088
arrestor	atgagtgattggtgcg	938-46-03		all 2'Ome arrestor for 938-46-01&02	2089
invader	taggctctatgtagtgaagaatgta	380-59-02		longer invader 380-59-02	2090
invader	gtcatgtaggctctatgtagtgaagaatgta	511-32-01			2091

Mouse IL-4

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	aacgaggcgccactctctctgtgacctgcg	511-14-01	FV-1 & FV-2		2092
arrestor	cgaggctcacagagagtcg	511-14-02		All 2'Ome + 3' amine arrestor for 511-14-01	2093
probe	aacgaggcgccactctctgtgacct-NH2	511-12-01	FV-1 & FV-2	458-34-01 with 3' amine	2094
arrestor	aggtcacagagagtcg	511-02-01		All 2'Ome + 3' amine arrestor for 458-34-01	2095
probe	cagtcacgtctctctgtgacct-NH2	511-16-01	MO2	3' amine	2096
arrestor	aggtcacagagagagtcg	511-16-02		All 2'Ome + 3' amine arrestor for 511-16-01	2097
arrestor	aggtcacagagagagtcg	511-50-01	MISC-1	All 2'Ome + 3' amine arrestor for 511-16-01	2098
probe	aaccagtcgtacgtctctgtgacct	458-35-01		All 2'Ome + 3' amine arrestor for 458-35-01	2099
arrestor	aggtcacagagagagtcg	511-03-01	MISC-1		2100
probe	ccagtcgtacgtctctgtgacct	458-35-02		All 2'Ome + 3' amine arrestor for 458-36-01	2101
arrestor	aggtcacagagagagtcg	511-04-01	MISC-2		2102
probe	aaccacccgcactctctgtgacct	458-36-01	FV-1 & FV-2		2103
probe	aacgaggcgccactctctgtgacc	511-13-01			2104
arrestor	ggtcacagagagagtcg	511-13-02	FV-1 & FV-2		2105
probe	aacgaggcgccactctctgtga-NH2	781-71-01		3' amine	2106
stacker	cctcggttcaaaatgcgatgatctctc	781-71-02		All 2'Ome for 781-71-01	2107
arrestor	tcacagagagagtcg	781-71-03		All 2'Ome arrestor for 781-71-01	2108
invader	atccatctcogtcgatgcgtgcctta	380-32-01			2109
invader	atccatctcogtcgatgcgtgcctta	380-32-02		Same as 380-32-01 but underlined base is mismatch to sequence	2110
probe	aacgaggcgccaccctctctgtgac-NH2	511-44-01	FV-1 & FV-2		2111
arrestor	gtcacagagagagagtcg	511-44-02		3' amine	2112
probe	aacgaggcgccaccctctctgt-NH2	511-68-01	FV-1 & FV-2	All 2'Ome + 3' amine arrestor for 511-44-01	2113
arrestor	acaggaagaagggtgcg	511-68-02		3' amine	2114
invader	ggcacatccatctcogtcgatgcgta	511-45-01		All 2'Ome + 3' amine arrestor for 511-68-01	2115
probe	cogtcacgcctctctctgtgacct-NH2	511-46-01	MO4-1/MO4-2/MO4-3		2116

202203 "64243001"

arrestor	acgaggccacaggaggagc	511-46-02	All 2'-Ome + 3' amine arrestor for 511-46-01	2117
probe	cggtcacgcctctctctgtgacdc-NH2	511-69-01	3' amine	2118
arrestor	gaggccacaggaggagc	511-69-02	All 2'-Ome + 3' amine arrestor for 511-69-01	2119
probe	cggtcacgcctctctctgtgacc-NH2	781-68-01	3' amine	2120
stacker	tcgggtcaaaatgccgatgtctctca	781-68-02	All 2'Ome stacker for 781-68-01	2121
arrestor	ggtcacaggaggagcg	781-68-03	All 2'-Ome arrestor for 781-68-01	2122
probe	cggtcacgcctctctctgtgac-NH2	781-69-01	3' amine	2123
stacker	ctcggttcaaaatgccgatgtctctca	781-69-02	All 2'Ome stacker for 781-69-01	2124
arrestor	gtcacaggaggagcg	781-69-03	All 2'-Ome arrestor for 781-69-01	2125
invader	acatccatctcgtgcatgtgcgtctctta	511-47-01		2126
probe	cagtcacgtctctctctctct-NH2	511-17-01	3' amine	2127
arrestor	aggagaaggagagagc	511-17-02	All 2'-Ome + 3' amine arrestor for 511-17-01	2128
invader	gcacatccatctcgtgcatgtgcga	511-18-01		2129
probe	cgcgcgagatcacctctgtgacc-NH2	781-83-01	3' amine	2130
arrestor	ggtcacaggagtgatc	781-83-02	All 2' Ome arrestor for 781-83-01	2131
probe	cggtcacgcctctctctgtgacc-NH2	781-82-01	3' amine	2132
invader	ccgtgcatggcgtctctca	781-82-02		2133
arrestor	ggtcacaggaggagcg	781-82-03	All 2' Ome arrestor for 781-82-01	2134
probe	ccgtcacgcctctctctgtgacc-NH2	781-84-01	3' amine	2135
invader	cgltcatggcgtctctctca	781-84-02		2136
arrestor	ggtcacaggaggagcg	781-84-03	All 2' Ome arrestor for 781-84-01	2137

Mouse IL-2

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	cagtcacgtctctctctctct-NH2	511-19-01	MO2	3' amine	2138
arrestor	agagtaacgtgtgtaaaactaaagagcg	511-19-02		All 2'-Ome + 3' amine arrestor for 511-19-01	2139
invader	gcactcaaatgtgtgtcagagccca	511-20-01			2140

Mouse IFN-γ

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	cagtcacgtctctctctgtgacitcc-NH2	511-24-01	MO2	3' amine	2141
arrestor	ggaactggcacaagagagagagcg	511-24-02		All 2'-Ome + 3' amine arrestor for 511-24-01	2142
probe	cagtcacgtctctctctgtgcagtc-NH2	511-23-01	MO2	3' amine	2143
arrestor	gaactggcacaagagagagagcg	511-23-02		All 2'-Ome + 3' amine arrestor for 511-23-01	2144
probe	cagtcacgtctctctctgtgcagit-NH2	511-21-01	MO2	3' amine	2145
arrestor	aactggcacaagagagagagcg	511-21-02		All 2'-Ome + 3' amine arrestor for 511-20-01	2146
invader	gcctcgcaggatctcagtcaccaa	511-22-01			2147

Human TNF-α

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	ccgcgcgagatcacctctgactcgtg-NH2	511-77-01	TT-1/TT-2	3' amine (based on 685-27-01-1 base shorter)	2148
arrestor	caggcagtcagagtgatctcg	511-77-02		All 2'-Ome + 3' amine arrestor for 511-77-01	2149
probe	ccgcgcgagatcacctctgactcgt-NH2	511-78-01	TT-1/TT-2	3' amine (based on 685-27-01-2 bases shorter)	2150
arrestor	agccagtcagatgactcgg	511-78-02		All 2'-Ome + 3' amine arrestor for 511-78-01	2151
invader	ctt gtc act cgg ggt tgg aga tga a	685-28-01			2152

Human IL-1β

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	gcgcgtcacgcctctctctgtttaggcc-NH2	511-79-01	MO4-1/MO4-2/MO4-3	3' amine (based on 685-21-01)	2153

127/

20220303 "66343001"
All 2'-Ome + 3' amine arrestor for 511-79-01
All 2'-Ome + 3' amine arrestor for 511-79-01

ggccctaaacagatgagggcgt
ggccctaaacagatgagagcgga
caggctcggagagagcacta

2154
2155
2156

Human IL-6

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments
probe	gcgcgcgcctctctctcattgaatcct-NH2	511-81-01	MO4-1/MO4-2/MO4-3	3' amine (based on 685-16-01)
arrestor	aggattcaatgagagagggcgga	511-82-01		All 2'-Ome + 3' amine arrestor for 511-81-01
arrestor	aggattcaatgagagagggcggt	511-82-02		All 2'-Ome + 3' amine arrestor for 511-81-01
probe	ccgtcaocctctctctcattgaatcct-NH2	781-27-01	MO4-1/MO4-2/MO4-3	3' amine (511-81-01 with new arm)
arrestor	aggattcaatgagagagggcg	781-27-02		All 2'-Ome + 3' amine arrestor for 781-27-01
probe	gcgcgcgcctctctctcattgaatcc-NH2	511-83-01	MO4-1/MO4-2/MO4-3	3' amine (based on 685-16-01)
arrestor	ggattcaatgagagagggcgga	511-84-01		All 2'-Ome + 3' amine arrestor for 511-81-01
arrestor	ggattcaatgagagagggcggt	511-84-02		All 2'-Ome + 3' amine arrestor for 511-81-01
probe	ccgtcaocctctctctcattgaatcc-NH2	781-28-01	MO4-1/MO4-2/MO4-3	3' amine (511-83-01 with new arm)
arrestor	ggattcaatgagagagggcg	781-28-02		All 2'-Ome + 3' amine arrestor for 781-28-01
probe	ccgtcaocctctctcattgaatc-NH2	781-29-01	MO4-1/MO4-2/MO4-3	3' amine (1 base shorter than 781-28-01)
arrestor	gattcaatgagagagggcg	781-29-02		All 2'-Ome + 3' amine arrestor for 781-29-01
probe	ccgcgcgcctctctcattgaatc-NH2	781-30-01	TT-1/TT-2	3' amine (781-29-01 with new arm)
arrestor	gattcaatgagagaggtatcic	781-30-02		All 2'-Ome + 3' amine arrestor for 781-30-01
invader	cca aaa gtc cag tga tga ttt tca cca ggc aag a	685-18-01		

2157
2158
2159
2160
2161
2162
2163
2164
2165
2166
2167
2168
2169
2170
2171

Secondary Cassettes

SRT	cggaggaagcagttgttgcgcctcgttaaNH2	FV-1	
FRET probe	Fcaac(Cy3)gctctcccg	277-68-05	
		187-46-01	
SRT	ccaggaaagcaagtgatgcctcgttt	FV-2	
FRET probe	Fcaac(Z21)gctctcg	996-29-01	
		767-29-02	
SRT	cggaaagcagttgtgagcggtgacgtNH2	MO4-1	
FRET probe	Fcaac(Cy3)gctctcccg	641-60-03	
		187-46-01	
SRT	cggaaagcagttgtgagcggtgacgtNH2	MO4-2	
FRET probe	Fcaac(Cy3)gctctcccg	562-93-01	
		187-46-01	
SRT	ccaggaaagcaagtgagcggtgacgdu	MO4-3	
FRET probe	Fcaac(Z21)gctctcg	996-29-02	
		767-29-02	
SRT	cggaggaagcagttgtgacgtcgggNH2	TT-1	
FRET probe	Fcaac(Cy3)gctctcccg	562-92-01	
		187-46-01	
SRT	cggaaagcagttgtgacgtcggcgNH2	TT-2	
FRET probe	Fcaac(Cy3)gctctcccg	685-56-01	
		187-46-01	
SRT	gctactgagatgaagagacgtgaciglaNH2	MO2	
FRET probe	Fcttc(Cy3)ctcagtagc	491-68-02	
		491-68-01	
SRT	cgg agg aag cgg ttg cgt aag act ggttaa-NH2	MISC-1	
FRET probe	Fcaac(Cy3)gctctcccg	458-35-03	
		187-46-01	
SRT	cgg agg aag cgg ttg gtt cgg gtt gg-PO3	MISC-2	
FRET probe	Fcaac(Cy3)gctctcccg	441-31-02	
		187-46-01	

2172
2173

2174
2175

2176
2177

2178
2179

2180
2181

2182
2183

2184
2185

2186
2187

2188
2189

2190
2191

1281

Oligo sequence descriptions: 5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications defined in ()

FRET Oligo/SRT Combinations

FRET Oligo	FRET Oligo	SEQ ID NO
Set 1	187-46-01	2192
Set 2	187-46-01	2193
Set 3	307-70-02	2194
Set 4	303-18-05	2195
Set 5	303-18-05	2196
Set 6	187-46-01	2197
Set 7	744-80-03	2198
Set 8	187-46-01	2199
Set 9	767-28-03	
Set 10	767-29-02	
Set 11	1067-20-01	
Set 12	307-70-02	
Set 13	491-01-01	
Set 14	187-46-01	

FRET Oligos	Oligo Sequence	SEQ ID NO
	Fam-CAAC(CY3)GCTTCCTCCG	2192
	Fam-ATT(CY3)TCTCAGAC-NH2	2193
	Fam-TAAC(CY3)GCTTCCTCCG	2194
	Fam-CAA(Dabcyl)TGCTTCCTCCG	2195
	Red Dye-CTC(Z-21)TCTCAGTGCG	2196
	Fam-CAC(Z-21)TGCTTCCTCCG	2197
	Fam-CAC(Z-28)TGCTTCCTCCG	2198
	Fam-CTTC(CY3)TCTCAGAC	2199

SRT	Oligo Sequence	SEQ ID NO
	CGGAGGAAGCAGTTGGAGCGGTGACGGT-NH2	2200
	CGGAGGAAGCAGTTGTGGCGGTGACGGTT	2201
	CAGTCTGAGATGAATGAGACGAGAGAGT-NH2	2202
	CGGAGGAAGCGGTTAGTCTGTCACGTCAT-NH2	2203
	CGGAGGAAGCGGTTAGTCTGCCACGTCAT-NH2	2204
	CGGAGGAAGCAGTTGGTGGCGCTCGTAA-NH2	2205
	CGGAGGAAGCAGTTGGTGGCGCTCGTAA-NH2	2206
	CGGAGGAAGCAGTTGGTGGCGCTCGGCT-NH2	2207
	CGGAGGAAGCAGTTGGTGGCGCTCGGCT-NH2	2208
	CGGAGGAAGCAGTTGGTGGCGCTCGGCT-NH2	2209
	CGGAGGAAGCAGTTGGTGGCGCTCGGCT-NH2	2210
	CGGAGGAAGCAGTTGGTGGCGCTCGGCT-NH2	2211
	CGGAGGAAGCAGTTGGTGGCGCTCGGCT-NH2	2212

Oligo Type	Oligo #	Oligo Sequence	Notes	Position	SEQ ID NO
Human IL-2	196-56-01	TCTGTGGCGTATCCTTCTTGGGCATGTAA			2213
Probe	196-56-02	GTGGCGTATCCTTCTTGGGCATGTAA		Splice Junction 2	2214
Probe	196-56-03	CGGTATCCTTCTTGGGCATGTAA			2215
Probe	128-93-02	GAAATGTTTCAGTTCTGTGG(dC)	ddC = dideoxy C		2216
Invader	145-030-05	AAAAGATACGCCACAGAACACG(BIOTIN- <u>dA</u>)TT			2217
Capture Oligo	315-28-01	TGGCGTATCTTAATTCATTCAAAAT		Splice Junction 1	2218
Probe	315-28-02	TGGGAGTTTGGGATCTTTGTAATTA			2219

Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2220
Probe	315-29-01	TGGCGTATCTAAATTATTAATCCATTC	2221
Invader	315-29-02	ATCCTGGTGAGTTGGGATTCCTGA	2222
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2223
Probe	315-29-03	TGGCGTATCTTCCATTCAAATCATC	2224
Invader	315-29-04	GTTTGGGATTCCTTTAAATTATTA	2225
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2226
Probe	315-30-01	GTGGCGTATCCTCTTGGGCAT	2227
Invader	315-30-02	GAAGATGTTTCAGTTCTGTGGC	2228
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2229
Human b-actin			
Probe	315-26-01	TGGCGTATCTCTGGGTCACTCTTC	2230
Invader	315-26-02	GGGTGTTGAAGGTCTCAACATGAA	2231
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2232
Probe	315-27-01	TGGCGTATCTTGTATCTTCATTGT	2233
Invader	315-27-02	ACTTGGCTCAGGAGGAGCAATGAA	2234
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2235
Probe	315-91-01	TGGCGTATCTGATCTGGGTCACT	2236
Invader	315-91-02	TGGCTGGGTGTTGAAGGTCTCAACAA	2237
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2238
Probe	315-92-01	ACCCGTATCTGCCAGGAAGGA	2239
Invader	315-92-02	AGTTTCGTGGATGCCACAGGAGACCAA	2240
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2241
Probe	315-92-03	AGTTTCGTGGATGCCACAGGAGACCAA	2242
Invader	195-023-01	TGGCGTATCTCTCAACATGATCT	2243
Probe	340-32-01	ACGTACATGGCTGGGGTGTGAAGGA	2244
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2245
Probe	340-33-01	TGGCGTATCTGATCTGGGTCACT	2246
Invader	340-33-02	TGGCTGGGTGTTGAAGGTCTCAACAA	2247
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2248
Probe	740-01-01	CCGTACGCCCTCGCTTGGGGTTC	2249
Invader	740-01-02	TCTGGGTCACTCTCTCGGGTTGA	2250
Arrestor	740-01-03	GAACCCCAAGGCGAGGCGI	2251
Secondary Cassette		Set 1	
Probe	740-01-08	CCGTACGCCCTCGGTCACTCTTCT	2252
Stacker	740-01-04	CGCGGTTGGCCTTGGGGTT	2253
Invader	740-01-06	CTGGGGGTGTTGAAGGTCTCAACATGATCC	2254
Arrestor	740-01-09	AGAAGATGACCCATGGCGG	2255
Secondary Cassette		Set 2	
Mouse GAPDH			
Probe	425-59-01	Fl-CTCTCTCGTCTCTCTGGAAGA	2256
Invader	425-59-02	ATTTGATGTTAGTGGGTCTCGCA	2257
Probe	425-60-01	Fl-CTCTCTCGTCTCTCTGACAAATC	2258
Invader	425-60-02	GCAGTTGGTGGTGCAGGATGCATA	2259
Probe	425-61-01	Fl-CTCTCTCGTCTCTACAGGAAATG	2260
Invader	425-61-02	GCTGTAGCCGTATTCATTGTCAA	2261
Probe	425-80-01	Fl-CTCTCTCGTCTCTCTCTGGAAG	2262
Invader	425-80-02	CATTGATGTTAGTGGGTCTCGA	2263
Probe	425-87-01	CTCTCTCGTCTCTCTCTGGAAGA	2264
Invader	425-87-02	ATTTGATGTTAGTGGGTCTCGCA	2265
Arrestor	425-87-04	TCTTCAGGAGAGACG	2266
Secondary Cassette		Set 3	
Probe	425-87-02	CTCTCTCGTCTCTCTCTGGAAG	2267
Invader	425-80-02	CATTGATGTTAGTGGGTCTCGA	2268
Splice Junction 1			
Splice Junction 1			
Splice Junction 2			
Splice Junction 3			
Splice Junction 5			
Splice Junction 3			
Splice Junction 4			
Splice Junction 3			
Splice Junction 3			
Splice Junction 3			
Splice Junction 3			
Splice Junction 4			
Splice Junction 6			
Splice Junction 8			
Splice Junction 4			
Splice Junction 4			
Splice Junction 4			
Splice Junction 4			

Arrestor	425-87-05	CTTCCAGGAGGAGACG	2269
Secondary Cassette		Set 3	
Probe	425-87-03	CTCTCTCGTCTCTACCGAAATG	2270
Invader	425-81-02	GCTGTAGCCGATTTCATTGTCAA	2271
Arrestor	425-87-06	CATTTCCTGGTAGAGACG	2272
Secondary Cassette		Set 3	
Probe	453-23-01	ATGACGTGACAGACCTCTGGAAGAT	2273
Probe	453-23-03	ATGACGTGACAGACCTCTGGAAGATG	2274
Invader	425-80-02	CATTGTATGTTAGTGGGTCTCGA	2275
Arrestor	453-23-04	CACTTCCAGGAGGGTCTGT-NH2	2276
Secondary Cassette		Set 4	
Probe	453-23-02	ATGACGTGGCAGACCTCTGGAAGAT	2277
Invader	425-80-02	CATTGTATGTTAGTGGGTCTCGA	2278
Arrestor	453-23-05	ACTTTCAGGAGGGTCTGT-NH2	2279
Secondary Cassette		Set 5	
Probe	435-67-04	CAGTACGTCCTCTCAGGTTTTG	2280
Invader	395-05-07	AGGCAGCTCTCAGGTCAGGTGTGA	2281
FRET Probe - Secondary Reaction	524-51-01	FI-CTTC(Cv3)TCTCAGTAGCG	2282
Secondary Reaction Template	524-51-03	CGCTACTGAGATGAAGGACGCTGACTGTGTA-NH2	2283
Secondary Reaction Template	524-51-04	CGCTAATGAGATGAAGGACGCTGACTGTGTA-NH2	2284
Probe	435-67-04	CAGTACGTCCTCTCAGGTTTTG	2285
Invader	395-05-07	AGGCAGCTCTCAGGTCAGGTGTGA	2286
FRET Probe - Secondary Reaction	524-51-02	FI-CTTC(Cv3)TCTCAGTAGCGA	2287
Secondary Reaction Template	524-51-05	TCGCTACTGAGATGAAGGACGCTGACTGTGTA-NH2	2288
Secondary Reaction Template	524-51-06	TCGCTAATGAGATGAAGGACGCTGACTGTGTA-NH2	2289
Human Ubiquitin			119
Probe	796-72-01	AACGAGGCGCACCTTTACATTTTCTATCGTATCC	2290
Invader	428-81-02	CCTTCCTTATCCTGGATCTTGGA	2291
Arrestor	796-72-02	GGATACGATAGAAAATGTAAAGGIGCGC	2292
Secondary Cassette		Set 6	
Probe	796-72-03	AACGAGGCGCACCTTTACATTTTCTATCGTATC	2293
Invader	428-81-02	CCTTCCTTATCCTGGATCTTGGA	2294
Arrestor	796-72-04	GATACGATAGAAAATGTAAAGGIGCGC	2295
Secondary Cassette		Set 6	
Probe	820-35-01	AACGAGGCGCACCTTTACATTTTCTATCG	2296
Probe	820-35-02	AACGAGGCGCACCTTTACATTTTCTATCGT	2297
Invader	428-81-02	CCTTCCTTATCCTGGATCTTGGA	2298
Arrestor	820-35-03	ACGATAGAAAATGTAAAGGIGCGC	2299
Secondary Cassette		Set 7	
Probe	820-88-01	AACGAGGCGCACCTTTACATTTTCTATCGT-NH2	2300
Probe	820-88-02	AACGAGGCGCACCTTTACATTTTCTATCGT	2301
Probe	820-88-03	AACGAGGCGCACCTTTACATTTTCTATCGTG	2302
Probe	820-88-04	AACGAGGCGCACCTTTACATTTTCTATCGTT	2303
Invader	428-81-02	CCTTCCTTATCCTGGATCTTGGA	2304
Arrestor	820-35-03	ACGATAGAAAATGTAAAGGIGCGC	2305
Secondary Cassette		Set 7	
Probe	847-65-01	GCCGCGCGCGCTTACATTTTCTATCGT	2306
Invader	428-81-02	CCTTCCTTATCCTGGATCTTGGA	2307
Arrestor	847-65-02	ACGATAGAAAATGTAAAGGIGCGC	2308
Arrestor	847-65-03	ACGATAGAAAATGTAAAGGIGCGC	2309
Secondary Cassette		Set 8	
Probe	936-61-01	AACGAGGCGCACCTTTACATTTTCTATCGTATCCG	2310
Invader	428-81-02	CCTTCCTTATCCTGGATCTTGGA	2311

Same as 820-35-02 with 3' Amine
Same as 820-35-02 with O-Me U for Blocking
Same as 820-35-02 with O-Me G for Blocking
Same as 820-35-02 with T for Blocking. The T is a mismatch against the RNA sequence.

Same as 428-87-01 without Biotin blocking group

132/

Stacker	752-01-05	AGCAGTACCCCATG	2353
Arrestor	641-62-04	CACACAGGGGAGCG-NH2	2354
Secondary Cassette		Set 10	
Probe	1138-49-02	AACGAGCGCACCTTCTGGAG-NH2	2355
Stacker	1138-49-01	CTGGCCAAGGAG	2356
Invader	1138-49-03	GTCCTGCATGAGATCTGTCTGA	2357
Arrestor	1138-49-04	CICCAAGAGGICGC	2358
Secondary Cassette		Set 11	
Probe	1138-49-06	AACGAGCGCACCTCTGCTTCT-NH2	2359
Stacker	1138-49-05	GGAGCIGGCCAA	2360
Invader	1138-49-07	TGGTGTCTGCATGAGATCTGA	2361
Arrestor	1138-49-08	TCCAGAGCAGAGTGC GC	2362
Secondary Cassette		Set 11	
Probe	1138-49-10	AACGAGCGCACCATGAGATCT-NH2	2363
Stacker	1138-49-09	GICGTCTCTGGA	2364
Invader	1138-49-11	GAGTCTGCTGGTGTCCCTGA	2365
Arrestor	1138-49-12	AGAICTCATGTGTCGC	2366
Secondary Cassette		Set 11	
Probe	1163-01-01	TGGCCAAAGGAGCA	2367
Stacker	1163-01-02	AACGAGCGCACCTTCTGGAGC-NH2	2368
Invader	1163-01-03	TCCTGCATGAGATCTGTCTGCA	2369
Arrestor	1163-01-04	GCTCCAGAAAGTGC GC	2370
Secondary Cassette		Set 11	
Probe	1163-01-05	GGCCAAGGAGCAC	2371
Stacker	1163-01-06	AACGAGCGCACCTCTGGAGCT-NH2	2372
Invader	1163-01-07	CCTGCATGAGATCTGTCTGCTA	2373
Arrestor	1163-01-08	AGCTCCAGAGTGC GC	2374
Secondary Cassette		Set 11	
Probe	1163-01-09	GCCAAGGAGCAGG	2375
Stacker	1163-01-10	AACGAGCGCACCTGGAGCTC-NH2	2376
Invader	1163-01-11	CCTGCATGAGATCTGTCTGCTTA	2377
Arrestor	1163-01-12	GAGCICAGGTGC GC	2378
Secondary Cassette		Set 11	
84hr			
Probe	688-51-01	CGCCGAGATCACCCAAACGAGGTCT	2379
Invader	688-51-02	AGCCCTTGAGTTTAAATACITCATAGGCACTA	2380
Arrestor	688-51-03	AGACCGTGTGGGTGATC	2381
Secondary Cassette		Set 14	
Probe	688-51-04	CGCCGAGATCACCTCAACACCATAAAAGCCA	2382
Invader	688-51-05	CGGGAGACTGAGGAATACGTCAACCACCA	2383
Arrestor	688-51-06	TGGCTTTATGGTGTGAGGIGATC	2384
Secondary Cassette		Set 14	
MSH2			
Probe	690-32-02	CCGTACGCTCCGAACTGCCCTAG	2385
Invader	690-32-04	GTATAATAGTCCCGACGATCAAAGAGGC	2386
Stacker	709-52-01	GGTCTTGGGYAGGG	2387
Arrestor	690-32-05	GCGGAGGGCTTGACGGGATC	2388
Secondary Cassette		Set 1	

bold indicates 2' O methyl base

ELISA Format Kits

Leukocyte-associated molecule-1 alpha subunit, human (h-LFA1)

G4731 Probe Set

p

i

c

5'-CTCTCTCGTCTCCAGGGCGTCTCGTGGG-PO4-3'
5'-CTGTACACACAGTCGGTGCTGA-3'
5'-AAAAAGGAGACGAGAGAGTG-3'

2389
2390
2391

for the remainder of the oligo sets on this list, the fret/target secondary sets are one of the following 11:

FRET/TARGET SETS	FRET	TARGET
set 1	307-70-03	502-93-01
set 2	307-70-03	502-93-02
set 3	187-46-01	641-60-02
set 4	187-46-01	277-68-05
set 5	187-46-01	685-56-01
set 6	187-46-01	641-60-03
set 7	187-46-01	649-10-01
set 8	680-17-02	782-70-02
set 9	187-46-01	277-68-06
set 10	187-46-01	491-02-02
set 11	307-70-03	761-40-02

FRETS

307-70-03
187-46-01
680-17-02

5'-Fam-ATT(CY3)TCTCAGACT-NH2-3'
5'-Fam-CAAC (CY3)GCTTCCTCCG-3'
5'-Fam-CGCT (CY3)TCTCGCTCGC-3'

2392
2393
2394

TARGETS

502-93-01
502-93-02
641-60-02
277-68-05
685-56-01
641-60-03
649-10-01
782-70-02
277-68-06
491-02-02

5'-CAGTCTGAGATGAATGATACGAGAGAGT-NH2-3'
5'-CAGTCTGAGATGAATGAGACGAGAGAGT-NH2-3'
5'-CGGAGGAAGCAGTTGGAGGCGTGACGGT-NH2-3'
5'-CGGAGGAAGCAGTTGGTGGCCTCGTTAA-PO4-3'
5'-GCGGAAGAAGCGGTTGGTGATCTCGGCGG-NH2-3'
5'-CGGAAGAAGCAGTTGGAGGCGTGACGGT-NH2-3'
5'-CGGAAGAAGCAGTTGGTGGCCTCGTTAA-NH2-3'
5'-GCGAGAGAGACAGCGCAAACCTGCCGTTTC-3'
5'-CGGAGGAAGCAGTTGTCCGCGAAGATG-3'
5'-CGGAAGAAGCAGTTGGAGACGTGACTGTGG-NH2-3'

2395
2396
2397
2398
2399
2400
2401
2402
2403
2404

20220303 15:23:43.001
5'-GGAGTGAGACAGCGAAAGACTGCCGTTCT-3'

761-40-02

Cell Lysate Kits

adipocyte lipid binding protein, mouse (m-aP2)

C289 Probe Set

i
p
a
a
a
p
p
a
a
p
a
a
p
p
a
a

FRET/TARGET SET 1

5'-CCGCCATCTAGGGTTATGATGCTA-3'
5'-CTCTCTCGTCTCCTTCACCTTCCTGTCG-NH2-3'
3'-PO4-AGCAGAGGAAGTGGAAAGGACAGC-5'
3'-NH2-AGCAGAGGAAGTGGAAAGGACAGC-5'
3'-PO4-AGAGCAGAGGAAGTGGAAAGGACAGC-5'
5'-AACGAGGGCGCACCTTCACCTTCCTGTCG-NH2-3;
5'-AACGAGGGCGCACCTTCACCTTCCTGTCG-Biotin-3'
3'-PO4-CCGCGTGGAAAGTGGAAAGGACAGC-5'
3'-PO4-CTCCGCGTGGAAAGTGGAAAGGACAGC-5'
5'-CATCTTCGCGGACTTCACCTTCCTGTCG-NH2
3'-PO4-GCCTGAAGTGGAAAGGACAGC-5'
3'-PO4-GCGCCTGAAGTGGAAAGGACAGC-5'
5'-CTTGCTCCCGGTGCTTCACCTTCCTGTCG-NH2
5'-CTTGCTCCCGGTGCTTCACCTTCCTGTCG-Biotin
3'-PO4-GGGCACGAAGTGGAAAGGACAGC-5'
3'-PO4-AGGGGCACGAAGTGGAAAGGACAGC-5'

2406
2407
2408
2409
2410
2411
2412
2413
2414
2415
2416
2417
2418
2419
2420
2421

G392 Probe Set

p
i

FRET/TARGET SET 1

5'-CTCTCTCGTCTCCACATTCCACCACAG-NH2-3'
5'-TTGTGTAAGTCACGCCCTTTCATAAT-3'

2422
2423

rev-ErbA, mouse (m-revErbA)

C155 Probe Set

p
i

FRET/TARGET SET 4

5'-AACGAGGCGCACGAAGCAGGGTAATGAATCT-NH2-3'
5'-CCACTCCTGAAGGCTCCGCAGTC-3'

2424
2425

Carnitine palmitolytransferase, mouse (m-CPT-1)

T352 Probe Set

p
i

FRET/TARGET SET 2

5'-CTCTCTCGTCTCAATGCCGTGTCGCC-NH2-3'
5'-GCTTCAGGGTTTGTGCGAAGAAGAAC-3'

2426
2427

C851 Probe Set

p
i

FRET/TARGET SET 2

5'-CTCTCTCGTCTCGTTTGCGGCGATACAT-NH2-3'
5'-CGGCTTGATCTCTTCACGGGTCCAC-3'

2428
2429

Carnitine palmitolytransferase, human (h-CPT-1)

135

Run	Time	Temp	Pressure	Flow	Conc	Yield	Quality
1	10.0	100.0	1.0	1.0	1.0	1.0	1.0
2	10.0	100.0	1.0	1.0	1.0	1.0	1.0
3	10.0	100.0	1.0	1.0	1.0	1.0	1.0
4	10.0	100.0	1.0	1.0	1.0	1.0	1.0
5	10.0	100.0	1.0	1.0	1.0	1.0	1.0
6	10.0	100.0	1.0	1.0	1.0	1.0	1.0
7	10.0	100.0	1.0	1.0	1.0	1.0	1.0
8	10.0	100.0	1.0	1.0	1.0	1.0	1.0
9	10.0	100.0	1.0	1.0	1.0	1.0	1.0
10	10.0	100.0	1.0	1.0	1.0	1.0	1.0
11	10.0	100.0	1.0	1.0	1.0	1.0	1.0
12	10.0	100.0	1.0	1.0	1.0	1.0	1.0
13	10.0	100.0	1.0	1.0	1.0	1.0	1.0
14	10.0	100.0	1.0	1.0	1.0	1.0	1.0
15	10.0	100.0	1.0	1.0	1.0	1.0	1.0
16	10.0	100.0	1.0	1.0	1.0	1.0	1.0
17	10.0	100.0	1.0	1.0	1.0	1.0	1.0
18	10.0	100.0	1.0	1.0	1.0	1.0	1.0
19	10.0	100.0	1.0	1.0	1.0	1.0	1.0
20	10.0	100.0	1.0	1.0	1.0	1.0	1.0
21	10.0	100.0	1.0	1.0	1.0	1.0	1.0
22	10.0	100.0	1.0	1.0	1.0	1.0	1.0
23	10.0	100.0	1.0	1.0	1.0	1.0	1.0
24	10.0	100.0	1.0	1.0	1.0	1.0	1.0
25	10.0	100.0	1.0	1.0	1.0	1.0	1.0
26	10.0	100.0	1.0	1.0	1.0	1.0	1.0
27	10.0	100.0	1.0	1.0	1.0	1.0	1.0
28	10.0	100.0	1.0	1.0	1.0	1.0	1.0
29	10.0	100.0	1.0	1.0	1.0	1.0	1.0
30	10.0	100.0	1.0	1.0	1.0	1.0	1.0
31	10.0	100.0	1.0	1.0	1.0	1.0	1.0
32	10.0	100.0	1.0	1.0	1.0	1.0	1.0
33	10.0	100.0	1.0	1.0	1.0	1.0	1.0
34	10.0	100.0	1.0	1.0	1.0	1.0	1.0
35	10.0	100.0	1.0	1.0	1.0	1.0	1.0
36	10.0	100.0	1.0	1.0	1.0	1.0	1.0
37	10.0	100.0	1.0	1.0	1.0	1.0	1.0
38	10.0	100.0	1.0	1.0	1.0	1.0	1.0
39	10.0	100.0	1.0	1.0	1.0	1.0	1.0
40	10.0	100.0	1.0	1.0	1.0	1.0	1.0
41	10.0	100.0	1.0	1.0	1.0	1.0	1.0
42	10.0	100.0	1.0	1.0	1.0	1.0	1.0
43	10.0	100.0	1.0	1.0	1.0	1.0	1.0
44	10.0	100.0	1.0	1.0	1.0	1.0	1.0
45	10.0	100.0	1.0	1.0	1.0	1.0	1.0
46	10.0	100.0	1.0	1.0	1.0	1.0	1.0
47	10.0	100.0	1.0	1.0	1.0	1.0	1.0
48	10.0	100.0	1.0	1.0	1.0	1.0	1.0
49	10.0	100.0	1.0	1.0	1.0	1.0	1.0
50	10.0	100.0	1.0	1.0	1.0		

U744 Probe set

FRET/TARGET SET 2

U744 Probe set

p

l

a

2430

2431

2432

2433

5'-CTCTCTCGTCTCAAACTTCAAAATACCACTGTAATCT-NH2-3'

5'-CTCACGTAATTTGTAGCCACCAGGAGTTTC-3'

3'-NH2-GCAGAGTTGAAGTTTATGGTGACATTAGA-5'

5'-TGGTCCAAAGACCCGACAGCAAAATCTTTGAG-3'

5'-CTCACGTAATTTGTAGCCCCACCAGGATTTTC-3' 2431

3' NH₂-GCAGAGTTGAAGTTTATGGTGACATTAGA-5'

5'-TGGTCCAAGACCGACAGCAAAATCTTGAG-3'

A456 Probe Set

FRET/TARGET SET 10

A436 Plaque Set
5'-CAGTCACGTCCTTCAGGGAGTAGCGCA-NH2-3'

p. 2435

3'-NH₂-GCAGAGAAGTCCCTCATGCCGT-5' 2436

C759 Probe Set

FRET/TARGET SET 2

C/59 Probe Set
TKEITAAKSETGCTZ
EACTCTCTCGTCTCGCCACGAGGATT-NH2
2437

P
5'-GTGTCGGTCTCCCGGCGAGCAATTTTAA-3'
E'CTCCCACCAGTCGGCTCAGGTAAATTTGTAA-3'

2438

J-GTGGGACCTCCGTGAGCATATTCATTAS
E' AATCCTGTTGGCGGAGACG-B-3'

2439

5'-TTAACTTCAAATACCACITGTAATCTTGGTCCAAGACCG-3'

G329 Probe Set

FRET/TARGET SET 4

G329 P10DE Sel
5'-ACCGAGGGCGCACCAATTTCCTAACG-b-3'
2441

5'-GCCGTTCCAGAGTCCGATTGATTTTGA-3'

3'-(biotin)-GCCGGTGGTTAATAAGGATTGC-5'

C1763 Probe Set

FRET/TARGET SET 9

G1763 Plaque Size

5'-GATGTTCCGCGGATTCCTGCTGCTGCTGCT-3'
5'-AAAGGTGTCCTGGGCTCGTGCT-3'

3'-(biotin)-GCCCTCTGTAAAGAACTACTAAGGAA-5'

Phosphatidylinositol-3-phosphate p110, human (h-PI3Kp110_)

FRET/TARGET SET 4

G1045 Probe Set (FV Arm)

G1045 F100de S61 (FV A1111)
5'-AACGAGGGCGCACGATTCCTCTGTG-NH2-3'

5' GACCAGCCCTGACATGAAC^{TTT}TAC-3'

3'-GACGACGGGTGCTCAAGGAGACAC-5' 2449

C1521 Probe Set

FRFT/TARGET SET 2

U132 | Fluor Jet

5'-GCTGCCCTTTTCAATAATCTTATCGAAG-3' 2451

3'-GGTCCGTTTCATCTACCTCAGCG-5'

3'NH₂-AGCAGAGCCCTCCCAATTATTTC-5'

2452

C2667 Probe Set

FRET/TARGET SET 2

G2007 Fluore Set

5'-CGGTCAGGTCATCCCCAGAC-3'

136/

2455
3'NH2-AGCAGAGCAACATAAGAAATTCGGTC-5'

FRET/TARGET SET 2
5'-CTCTCTCGTCTCCTCTGTGGATATGTTG-NH2-3'
5'-CTAAGTTTTTCAGGGATGGATGGTTCATGC-3'
3'NH2-AGCAGAGGAGACACCTATACAAAC-5'

FRET/TARGET SET 2
5'-CTCTCTCGTCTCAACTGTGTGGC-NH2-3'
5'-TTAAGATCTGTAGTCTTTCCGAAC-3'
3'NH2-AGCAGAGTTCACACACCCCG-5'

Cartilage-derived morphogenic protein 1, human (h-CDMP1)
FRET/TARGET SET 6
5'-CCGTCAAGCCTCCTGTTGCCCTCCC-(biotin)-3'
5'-AGCCTCCAACTTCACGCTGT-3'
5'-GGGAGGCAACAGGAGCGG-(biotin)-3'

FRET/TARGET SET 5
5'-CCGCCGAGATCACTGAAGAGGATGCTGATGG-(biotin)-3'
5'-ACACCCACGTTGTTGGCAGAGTCAAG-3'
5'-CCATCAGCATCCTCTTCAGTGATCTCGG-(biotin)-3'

FRET/TARGET SET 6
5'-CCGTCAAGCCTCCTGTTGCCCTTGGGTTCA-NH2-3'
5'-TCTGGGTCACTCTTTTCACGGTTGA-3'
3'-GCGGAGCGGAATCCCAAGT-5'
5'-GAGGGGCTCGGTGAGC-3'

FRET/TARGET SET 5
5'-CCGCCGAGATCAGGAGTCTTGCCCTTTC-(biotin)-3'
5'-CCGCCGAGATCAGGAGTCTTGCCCTTTC-NH3-3'
5'-TTCACACACGCTTTTCTGATCTCC-3'
3'-(biotin)-CTAGTGCTCAAGAACGGAAAG-5'

FRET/TARGET SET 2
5'-CTCTCTCGTCTCCCAAGAGCCAGT-(biotin)-3'
5'-TTCCTTCATCTAGGACAAAGTGTGGAACATAA-3'
5'-ACTGGCCTTCTGGGAGACG-(biotin)-3'

a

G537 Probe Set

p
i
a

T3192 Probe Set

p
i
a

Cartilage-derived morphogenic protein 1, human (h-CDMP1)

A831 Probe Set

p
i
a

A1691 Probe Set

p
i
a

b-actin, rat (r-bACT)

C1671 Probe Set (longer)

p
i
a
s

Bile Salt port Pump, rat (r-BSEP)

p
p
i
a

G1288 Probe Set

p
i
a

137/

A790 Probe Set

p 5'-CCGTCACGCCCTCTTCTCCTCATTCTCCT-(biotin)-3' 2479
i 5'-CCCAATTCCATTCTCATTATTCTCCGGAAGTAAATC-3' 2480
a 5'-AGGAGAAATGAGGAAAGAGGCG-(biotin)-3' 2481

Nitric Oxide Synthase 2A, human (h-iNOS2)

A3418 Probe Set

p FRET/TARGET SET 6 2482
i 5'-CCGTCACGCCCTCTGTCTTTCTTCGC-(biotin)-3' 2483
a 5'-GCTGCACCCGCCACCCC-3' 2484
5'-GCGAAGAAAGACAGAGGCG-(biotin)-3'

Neutral Carboxy Ester Hydrolase, human (h-NCEH)

A1221 Probe Set

p FRET/TARGET SET 7 2485
p 5'-AACGAGGGCGCACTCTTCTTATTCTCCTG-B-3' 2486
i 5'-AACGAGGGCGCACTCTTCTTATTCTCCTG-NH2-3' 2487
s 5'-GTCTCAAAGTCCACCACAGTCTC-3' 2488
5'-CAGGAGAAATAGAAAGAGTGCGC-(biotin)-3'

A1221 Probe Set

p FRET/TARGET SET 6 2489
p 5'-CCGTCACGCCCTCTCTTCTTATTCTCC-3' 2490
i 5'-CCGTCACGCCCTCTCTTCTTATTCTCC-NH2-3' 2491
a 5'-GTCTCAAAGTCCACCACAGTCTC-3' 2492
s 3'-GCGGAGAGAGAATAAGAGG-5' 2493
5'-TGGGATGGTCTCTGGGC-3'

C1309. Probe Set

p FRET/TARGET SET 8 2494
i 5'-GAACGGCAGGTTTGGCACTCTTGGCATT-NH2-3' 2495
a 5'-CAGGTAGGCGTAGGTCTTGA-3' 2496
s 3'-NH2-CGTCCAAACCGTGAGAACCGTAA-5' 2497
5'-GGCTCTGTGCTGGGCTA-NH2-3'

Peroxisomal Proliferation Activator Protein Receptor alpha, human (h-PPAR_α)

G1480 Probe Set

p FRET/TARGET SET 6 2498
i 5'-CCGTCACGCCCTCCCGACTCCGTCT-(biotin)-3' 2499
a 5'-CGGGTGCAGCGCAGCATT-3' 2500
5'-AGACGGAGTCGGAGGCG-(biotin)-3'

A1044 Probe Set

p FRET/TARGET SET 6 2501
i 5'-CCGTCACGCCCTGTCACTTGATCGTTCT-(biotin)-3' 2502
a 5'-TGGCCTCATAAACTCCGTATTTTAGCAAG-3' 2503
5'-AGAACGATCAAGTGACAGAGGCG-(biotin)-3'

C 1311 Probe Set
 p 2504
 i 2505
 a 2506

Peroxisomal Proliferation Activator Protein Receptor beta, human (h-PPAR_)
 A595 Probe set
 6B. Designed truncated probe and stackers to reduce temperature

FRET/TARGET SET 6

5'-CCGCCGAGATCACGTGTCTACGTTTAGAAG-(biotin)-3'
 5'-CACATGTACAATACCCTCCGCAATTTTCAATC-3'
 5'-CTTCTAAACGTAGGACACGTCGATCTCGG-(biotin)-3'

5'-CCGTCACGCCCTCTCTTCTGAATCTTGC-3'
 5'-CTGGCACTTGTGCGGTTCTA-3'
 3'-NH2-GCGGAGAGAAAGACTTAGAACG-5'
 5'-AGCTGCGCTCACACTTCTCGT-3'

6C. Design for new INVADER assay with 50% 2'-Me.

FRET/TARGET SET 6

5'-CCGTCACGCCCTCTCTTCTGAATCTTG-NH2-3'
 5'-CTGGCACTTGTGCGGTTCTA-3'
 3'-NH2-GCGGAGAGAAAGACTTAGAAC-5'
 5'-CAGCTGCGCTCACACTTCTCGT-NH2-3'

6D. Truncate probe.

FRET/TARGET SET 6

5'-CCGTCACGCCCTCTCTTCTGAATCTT-NH2-3'
 5'-CCTGGCACTTGTGCGGTTCTA-3'
 5'-GCAGCTGCGCTCACACTTCTCGT-NH2-3'

C891 Probe Set

FRET/TARGET SET 7

5'-AACGAGCGGCACGGTAGGCATTGTAGA-3'
 5'-CCTTCCTTTTGGTCATGTTGAAGTTTTCAC-3'
 3'-CGCGTGCCATCCGTAACATCT-5'
 5'-TGTGCTTGAGAAAGGCCCTTCA-3'

Substance P, rat (r-SubP)
 C344 Probe Set

FRET/TARGET SET 6

5'-CCGTCACGCCCTCGCCACTTGTTTTCANH2-3'
 5'-CCATGCCCATAAAGAGCGCTTTAACAGGA-3'
 3'-NH2-GCGGAGCGGTGAACAAAAGT-5'
 NO STACKER

A396 Probe Set

FRET/TARGET SET 6

5'-CCGTCACGCCCTCTTATGCCCTTTTGTGA-NH2-3'

i	5'-TGCCCATTAGTCCAAACAAGGAATCTGTA-3'	2526
a	3'-GCGGAGAAATACGGAAAAACACT-5'	2527
s	5'-GAGATCTGACCATGCCCATAAAGAGCC-NH2-3'	2528
C752 Probe Set		
p	5'-AACGAGGCGCACGCTGGCAAACCTTGT-NH2-3'	2529
i	5'-CCTTTCTGTCCTTTGGAGACTTGCATCA-3'	2530
a	3'-NH2-CGCGTGGACCGTTTGAACA-5'	2531
s	5'-ACAACTCCATCAACACTGTGCTTTGCTG-NH2-3'	2532
Hepatic Lipase, human (h-LIPC)		
A830 Probe Set		
p	5'-AACGAGGCGCACTCTAGGAAGTGGA-NH2-3'	2533
i	5'-GTGCTGGGCAATATGTCTGTAGAGCG-3'	2534
a	3'-NH2-CGCGTGAGATCCTTCACCGT-5'	2535
s	5'-GCCAGGCTGGAAGAGC-NH2-3'	2536
C1154 Probe Set		
p	5'-CCGCCGAGATCACCGTCTCAGTTTGGT-NH2-3'	2537
i	5'-CGAGTAGTGACATGGTAAAAGTTGTTGTATTGGCT-3'	2538
a	3'-NH2-CTCTAGTGGCAGAGTCAAAACCA-5'	2539
Hepatic Lipase, rat (r-LIPC)		
G357 Probe Set		
p	5'-CCGCCGAGATCACCGTTCACGGGT-NH2-3'	2540
i	5'-GGGAGATCCAGTCCACTAATCCA-3'	2541
a	3'-NH2-TCTAGTGTGCAAGTGCCCAA-5'	2542
s	5'-GGGACTGTCGGGACTTCAGG-NH2-3'	2543
C1167 Probe Set		
p	5'-GAAACGGCAGGTTTGGGGAATTTCTTTATTCTT-NH2-3'	2544
i	5'-ATTCTTCGCCCCAGGGTGATG-3'	2545
a	3'-NH2-GTCCAAACCCCTTAAAGAAATAAAGAA-5'	2546
s	5'-CTTTTGTCCCCAGCAGTGT-NH2-3'	2547
Metabotropic Glutamate Receptor 2, rat (r-mGluR2)		
C1403 Probe Set		
p	5'-AACGAGGCGCACGGTGGTGTGGGA-NH2-3'	2548
i	5'-GCCTCATAGCATCGCAGAGGTGT-3'	2549
a	3'-NH2-CGCGTGCCACCAACCCCT-5'	2550
s	5'-CAGAGGGCACGGTGCATGTTGT-NH2-3'	2551

G-protein coupled receptor 2, rat (r-ETBR-LP2)

A1629 Probe set

p	FRET/TARGET SET 8	2552
i	5'-GAACGGCAGGTTTGTACAGACACCGC-NH2-3'	2553
a	5'-GAGAGGCCAAAGTGAGACCATGTGAAAGAAA-3'	2554
s	3'-NH2-CGTCCAAACAGTCGTCTGGCG-5'	2555
	5'-CATGGATCGGCATGGCCCC-NH2-3'	

i kappa b alpha, human (h-MAD3)

C542 Probe Set

p	FRET/TARGET SET 7	2556
i	5'-AACGAGGGCGCACGGTGTAGGGGGG-(biotin)-3'	2557
a	5'-GCCCTGCTCACAGGCAAT-3'	2558
	5'-CCCCCTACACCGTGGCG-(biotin)-3'	

C363 Probe Set

P	FRET/TARGET SET 6	2559
i	5'-CCGTACCGCCTCGTCAGTGCCCTTTTC-(biotin)-3'	2560
A	5'-CACCTGGCGGATCACCTCCATGT	2561
	5'-GAAAAGGCACTGACGAGGCG-(biotin)-3'	

G953 Probe Set

P	FRET/TARGET SET 6	2562
i	5'-CCGTACCGCCTCCCTCATCCTCACT-(biotin)-3'	2563
A	5'-ACTCTGACTCTGTGTATAGCTCTT	2564
	5'-AGTGAGGATGAGGAGGCG-(biotin)-3'	

C923 Probe Set

P	FRET/TARGET SET 7	2565
i	5'-AACGAGGGCGCACGGTTTCTAGTGTCANH2-3'	2566
A	5'-CTCACTCTCTGGCAGCATCTGAAT-3'	2567
S	3'-NH2-CGCGTGCCAAAAGATCACAGT-5'	2568
	5'-GCTGGCCCCAGCTGC-NH2-3'	

Lecithin cholesterol acyltransferase, human (h-LCAT)

C821 Probe Set (truncated Probe Design)

p	FRET/TARGET SET 5	2569
i	5'-CCGCCGAGATCACGGTTATGGCTG-NH2-3'	2570
a	5'-CCAGGGGGAGGTGGTC-3'	2571
s	3'-NH2-TCTAGTGCCAATACGCCGACG-5'	2572
	5'-CTCCTCTTTAGCTTGATGCTGG-NH2-3'	

C827 Probe Design

p	FRET/TARGET SET 8	2573
i	5'-GAACGGCAGGTTTGGGTGGTGTATGCG-NH2-3'	2574
a	5'-AGAGGGGAAACATCCAGGGGGAG-3'	2575
	3'-NH2-CGTCCAAACCCACCACCAATACGCG-5'	

141

C1217 Probe Design		
p	FRET/TARGET SET 5	2576
i	5'-CCGCCGAGATCAGGAGATGCTGTATCCC-NH2-3'	2577
a	5'-GGTCAGGTTGCTGAAGACCATGTTG-3'	2578
	3'-NH2-TCTAGTGCTCTACGACATAGGG-5'	
Apolipoprotein A-1, human (h-ApoA1)		
A177 Probe Set	FRET/TARGET SET 6	2579
p	5'-CCGTCACGCCCTCTGAGCACATCCACG-NH2-3'	2580
i	5'-ACATAGTCTCTGCCGCTGTCTTA-3'	2581
a	3'-NH2-GCGGAGACTCGTGTAGGTGC-5'	2582
s	5'-TACACAGTGCCAGGTCCTT-NH2-3'	
A227 Probe Set (titrate length of 2'-O-Me in Invader)	FRET/TARGET SET 8	2583
p	5'-GAACGGCAGGTTTGTCCTCCAGCGG-NH2-3'	2584
i	5'-GTCAAGGAGCTTTAGGTTTAGCTGTTTA-3'	2585
i	5'-GTCAAGGATCTTTAGGTTTAGCTGTTTA-3'	2586
i	5'-GTCCCAGTTGTCAAGGATCTTTAGGTTTAGCTGTTTA-3'	2587
A	3'-NH2-GTCCAAACAGGGTCCGCC-5'	2588
s	5'-AGCCTTCAAACTGGGACACATAGTCTC-NH2-3'	
G350 Probe Set	FRET/TARGET SET 5	2589
p	5'-CCGCCGAGATCAGTCTCTGTCTCCTT-NH2-3'	2590
i	5'-CTCCTGCCTCAGGCCG-3'	2591
a	3'-NH2-TCTAGTGGAGACAGAGGAA-5'	2592
s	5'-TTCCAGGTTATCCCAGAACTCC-NH2-3'	
G233 Probe Set	FRET/TARGET SET 11	2593
p	5'-AGAACGGCAGTCTTTCTGTCTTCCCAAGG-NH2-3'	2594
i	5'-CCAGTTGTCAAGGAGCTTTAGGTTTAGT-3'	2595
a	3'-NH2-CGTCAGAAAGACAAAAGGGTTCC-5'	2596
s	5'-CGGAGCCTTCAAACTGGGACACATAGT-NH2-3'	
Metabotropic Glutamate Receptor 1, rat (r-mGluR1)		
T934 Probe Set	FRET/TARGET SET 11	2597
p	5'-AGAACGGCAGTCTTTAGAAATAGCGCATCTGT-NH2-3'	2598
i	5'-CACTCAGGCTATGCTTGTGGCT-3'	2599
a	3'-NH2-GTCAGAAATCTTATCCGCTAGACA-5'	2600
s	5'-GGGATGTCGAACAGCTGGAGAGATTCT-NH2-3'	
Ubiquitin, human (h-UBI)		

1421

G119 Probe Set (MO4 Arm)	p	5'-CCGTCACGCCCTCTTTACATTTTCTATCGTATCCG-(biotin)-3'	2601
	i	5'-CCTTCCTTATCCTGGATCTTGGCA-3'	2602
	a	3'-(biotin)-GCGGAGGAAATGTAAAGATAGCATAGGC-5'	2603
FRET/TARGET SET 6			
G119 Probe Set	p	5'-CGCCGAGATCACCTTTACATTTTCTATCGTATCCG-(biotin)-3'	2604
	i	5'-CCTTCCTTATCCTGGATCTTGGCA-3'	2605
	a	3'-(biotin)-CTAGTGGAATGTAAAAAGATAGCATAGGC-5'	2606
FRET/TARGET SET 5			
G131 Probe Set	p	5'-CATCTTCGCGGACTGGATCTTGGCC-(biotin)-3'	2607
	i	5'-GCTGATCAGGAGGAATTCCTTCCTTATCT-3'	2608
	a	3'-(biotin)-GCCTGACCTAGAACCCGG-5'	2609
FRET/TARGET SET 9			
Scanned G119 region (ELISA format (No Arrestors))	p	5'-CTCTCTCGTCTTACATTTTCTATCGTATCCG-NH2-3'	2610
	p	5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCG-NH2-3'	2611
	p	5'-CTCTCTCGTCTCCTTACATTTTCTATCGTATCCG-NH2-3'	2612
	p	5'-CTCTCTCGTCTCCCTTACATTTTCTATCGTATC-NH2-3'	2613
	p	5'-CTCTCTCGTCTCGCCTTACATTTTCTATCG-NH2-3'	2614
	i	5'-GGAAATTCCTTATCCTGATCTTGA-3'	2615
	i	5'-GGAAATTCCTTATCCTGATCTTGGC-3'	2616
	i	5'-CCTTCCTTATCCTGGATCTTGGCA-3'	2617
	i	5'-TTCCTTATCCTGGATCTTGGCCA-3'	2618
	i	5'-TCCTTATCCTGGATCTTGGCCTA-3'	2619
FRET/TARGET SET 7			
Ubiquitin, mouse (m-UBIQ)	p	5'-CCGTCACGCCCTCCCTTCTGGATGTTGTA-(biotin)-3'	2620
	i	5'-CCAGGTGCAGGGTTGACTA-3'	2621
	a	3'-(biotin)-GCGGAGGGAAGACCTACAACAT-5'	2622
FRET/TARGET SET 5			
G294 Probe Set	p	5'-CGCCGAGATCACCCCTTCTGGATGTTGTA-(biotin)-3'	2623
	i	5'-CCAGGTGCAGGGTTGACTA-3'	2624
	a	3'-(biotin)-CTAGTGGAAGACCTACAACAT-5'	2625
FRET/TARGET SET 6			
G294 Probe Set	p	5'-CCGTCACGCCCTCCCTTCTGGATGTTGTAAT-NH2-3'	2626
	i	5'-CCAGGTGCAGGGTTGACTA-3'	2627

3'-NH₂-GCGGAGGGAAGACCTACACATTA-5'

2628

FRET/TARGET SET 6

G294 Probe Set

5'-CCGTCACGGCTCCCTTCTGGATGTTGTAATC-NH2-3'
5'-CCAGGTGCAGGGTTGACTA-3'
3'-NH2-GCGGAGGGAAGACCTACAACATTAG-3'

2629
2630
2631

FRET/TARGET SET 7

T514 Probe Set

5'-AACGAGGCGCACATGTTGTAATCAGAGAGGG-NH2-3'
5'-TGCAGGGTTGACTCTTTCTGGA-3'
3'-NH2-CGCGGTGTACAACATTAGTCTCTCCC-5'

2632
2633
2634

FRET/TARGET SET 9

G750 Probe Set

5'-CATCTTCGCGGACCTTCTGGATGTTGTA-NH2-3'
5'-GGACCAGGTGCAGGGTTGACTT-3'
3'-NH2-GCCTGGAAAGACCTACAACAT-5'

2635
2636
2637

FRET/TARGET SET 9

G185 Probe Set

5'-CATCTTCGGGACTTCACGTTCTCGATGG-NH2-3'
5'-CCCTCTTTATCCTGGATCTTGCA-3'
3'-NH2-GCGCCTGAAGTGAAGAGCTACC-5'

2638
2639
2640

FIGURE 48

12		
1	8	C
2	5	U
3	5	U
4	2	U
5	1	U
6	2	C
7	7	G
8	7	A
9	1	U
10	1	C

10034239 00000000
00000000 00000000

FIGURE 49

Assays	SRT #	Oligo Type	Secondary system	Oligo Sequence (5' to 3')	SEQ ID NO:
human v-FOS	2	Probe	FRET probe	FL-CAC-Z28-TGC TTC GTG G	2868
		Invader	Secondary Reaction Template 1	CCA GGA AGC AAG TGG TGC GCC TCG tt	2869
		Stacker	Secondary Reaction Template 2	CCA GGA AGC AAG TGG AGG CGT GAC ggt	2870
		Arrestor	Secondary Reaction Template 3	CCA GGA AGC AAG TGA CGC AGC GAC ggt	2871
human v-FOS	2	Probe		CCGTCACGCGCTCGTCATCAGGGAT NH2	2872
		Invader		CTCTTCTGGGAAGCCCCAGA	2873
		Stacker		ctgacaggcaggt	2874
		Arrestor		atccctgatgacgagggc	2875
human v-FOS	2	Probe		CCGTCACGCGCTCCAGCAGGTTG NH2	2876
		Invader		ACTCTAGTTTTTCTTCTCCTTA	2877
		Stacker		gcaatcgggtctgc	2878
		Arrestor		ccaagggtgctgagggc	2879
human v-FOS	2	Probe		CCGTCACGCGCTCAGAGGCAGGG NH2	2880
		Invader		GGCTCAGGGTCATTGAGGC	2881
		Stacker		tgaaggcctctc	2882
		Arrestor		cctgcctctgagggc	2883
mouse interferon gamma	2	Probe		CCG TCA CGC CTC CCT TTT GCC AGT TG NH2	2884
		Invader		GCT CTG CAG GAT TTT CAT GTC ACC ATA	2885
		Stacker		ctc cag ata tcc aag aag ag	2886
		Arrestor		gaa ctg gca aaa ggg agg cg	2887
mouse interferon gamma	1	Probe		AAC GAG GCG CAC CCTTTTGCCAGTTG NH2	2888
		Arrestor		gaactggcaaaagggtgcg	2889

146

146

mouse interferon gamma	2	Probe Invader Stacker Arrestor	CCG TCA CGC CTC CCT TTT GCC AGT TA NH2 GCT CTG CAG GAT TTT CAT GTC ACC ATA ctc cag ata tcc aag aag ag gaa ctg gca aaa ggg agg cg	2890 2891 2892 2893
mouse interferon gamma	2	Probe	CCG TCA CGC CTC CCT TTT GCC AGT TT NH2	2894
mouse interleukin 10	2	Probe Invader Stacker Arrestor	CCG TCA CGC CTC AGT TGT TTC CGT C NH2 AGA GGT ACA AAC GAG GTT TTC CAA GGC agc taa gat ccc tgg atc aga tt aga ga aac gga aac aac tga ggc g	2895 2896 2897 2898
mouse interleukin 10	2	Probe	CCGTCACGCCTCAGTTGTTTCCGTT NH2	2899
mouse interleukin 10	2	Probe Stacker	CCGTCACGCCTCAGTTGTTTCCGTC NH2 agtaagatccctgga	2900 2901
mouse interleukin 10	2	Probe	CCGTCACGCCTCAGTTGTTTCCGTC NH2	2902
mouse interleukin 1 beta	2	Probe Invader Stacker Arrestor	CCGTCACGCCTCTCATCTTTTGGG NH2 GGTTTGGAAAGCAGCCCTA tcctcaacttcaaagaacag cccaaaaagatgagaggcg	2903 2904 2905 2906
mouse interleukin 1 beta	2	Probe Invader Stacker Arrestor	CCGTCACGCCTCTGTCGTTGCT NH2 CCCAAGGCCACAGGTATTTA tggttctctgtacaaag agcaacgacagaggcg	2907 2908 2909 2910
mouse interleukin 1 beta	2	Probe Invader Stacker Arrestor	CCGTCACGCCTCCTTTTCATTACACAG NH2 GGTGGGTGTGCCGTA gacaggtatagattcttcc ctgtgtaatgaaaggaggcg	2911 2912 2913 2914
mouse interleukin 2	2	Probe Invader Stacker Arrestor	CCG TCA CGC CTC CCC TTT AGT TTT ACA A NH2 GAA TTG GCA CTC AAA TGT GTT GTC AGA GA cag tta ctc tga tat tgc tga aat tct ca gtt gta aaa cta aag ggg agg cg	2915 2916 2917 2918

mouse interleukin 2	1	Probe Stacker Arrestor	AACGAGGCGCACCCCTTTAGTTTACA NH2 acagttactctgatattgctg ttg taa aac taa agg cgt gcg	2919 2920 2921
mouse interleukin 2	2	Probe Stacker Arrestor	CCG TCA CGC CTC CCC TTT AGT TTT ACA A NH2 cagttactctgatattgctg tgt aaa act aaa ggg gag gc	2922 2923 2924
mouse interleukin 2	2	Stacker	acagttactctgatattgctg	2925
mouse interleukin 4	2	Probe Invader Stacker Arrestor	CCG TCA CGC CTC CTC CTG TGA CC NH2 ACA TCC ATC TCC GTG CAT GGC GTC CCT TA tgg gtt caa aat gcc gat gat ctc tct ca ggg cac agg agg agg cg	2926 2927 2928 2929
mouse interleukin 4	2	Probe Stacker	CCG TCA CGC CTC CTC CTG TGA CC NH2 tgg gtt caa aat gcc gat ga	2930 2931
mouse interleukin 4	2	Probe	CCG TCA CGC CTC CTC CTG TGA CA NH2	2932
mouse interleukin 4	2	Probe Stacker	CCG TCA CGC CTC CTC CTG TGA C NH2 ctc ggt tca aaa tgc cga tga	2933 2934
mouse interleukin 4	2	Probe	CCG TCA CGC CTC CTC CTG TGA CT NH2	2935
mouse interleukin 6	2	Probe Invader Stacker Arrestor	CCG TCA CGC CTC TCT TTT CTC ATT T NH2 GTT CAT ACA ATC AGA ATT GCC ATT GCA CAA CA cca cga tt ccc aga gaa c aaa tga gaa aag aga ggc	2936 2937 2938 2939
mouse interleukin 6	2	Probe Invader Stacker Arrestor	CCGTACAGCCCTCAGGGAAGGCC NH2 TCCTCTCCGGACTTGTGAAGTC gtggtgtcaccagcat ggccttccctgagcc	2940 2941 2942 2943
mouse interleukin 6	2	Probe Invader Stacker Arrestor	CCGTACAGCCCTCAGTGGTATCCT NH2 GGTATAGACAGGCTCTGTGGGC ctgtgaagtctctc aggataccacigaggc	2944 2945 2946 2947

mouse SRB1	2	Probe Invader Stacker Arrestor	CCG TCA CGC CTC GGT TCT CCA C NH2 CAG GCT GGA AAT GGA GGC TGC A gaa gga cac ggt gtc gtt gtc a gtg gag aac cga ggc g	2948 2949 2950 2951
rat CX3C	2	Probe Invader Stacker Arrestor	CCG TCA CGC CTC CTG TAC ACG AGA G NH2 GGT GGT GAT GGT GAT GGC TA aga gag acc ggg ata gat agc ctc tcg tgt aca gga ggc	2952 2953 2954 2955
rat CX3CR1	1	Probe Invader Stacker Arrestor	AAC GAG GCG CAC CCA CCA AGA GG NH2 AGG CGT CCA GAA GAG GAA GAC AAC AAA atg agc cta atg gct c cct ctt ggt ggg tgc gc	2956 2957 2958 2959
rat CX3CR1	1	Stacker	atgagcctaattggtcttggc	2960
rat Homer 1C	1	Probe Invader Stacker Arrestor	AACGAGGCGCACGCTTGACTACTAACA NH2 GGCTGTGCACCGCGTTTC cattcagctcgt tgttagtagtcaagcgtcgc	2961 2962 2963 2964
rat Homer 1C	1	Probe Invader Stacker Arrestor	AACGAGGCGCACGTTCCATCTTC NH2 CTGTGAAGGGTACTGGTCAC tcctgcgactctc gaagatggaacgtgcgc	2965 2966 2967 2968
rat Homer 1C	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCCCTCTGTT NH2 TCCTGTAGTTTCTGAGTCAAAGAGTA cttgaagttctctggcg aacagaggggtgcgc	2969 2970 2971 2972
rat Homer 1C	2	Probe Arrestor	CCGTCACGCCCTCCCCTCTGTTC NH2 gaacagaggggagggcg	2973 2974
mouse tumor necrosis factor (a)	2	Probe Invader Stacker Arrestor	CCGTACGCCCTCAGATGATCTGAGT NH2 ACAGGCTTGTCACCTCGAATTTTGAGAC gtgagggctctggg actcagatcatctgagggcg	2975 2976 2977 2978

human v-JUN	1	Probe Invader Stacker Arrestor	AACGAGGCGCACTCGGACGG NH2 GTAGCCATAAGGTCCGCTCA gaggaaacgagcggtga cgcgcgagtgccg	3012 3013 3014 3015
human v-JUN	2	Probe Invader Stacker Arrestor	CCGTACAGCCCTCCTCGGACGG NH2 GTTACTGTAGCCATAAGGTCCGCTA tggttcgagcggtga ccgcgcgagggaggc	3016 3017 3018 3019
human v-JUN	2	Probe Invader Stacker Arrestor	CCGTACAGCCCTCAAGGTCCGCT NH2 GATCTTGGGGTTACTGTAGCCATC ctcggacgggaggaac agcggaccttgagg	3020 3021 3022 3023
human v-MYC	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCTGTCGTTGAG NH2 CAGGACTTGGGCGGAGCTGA aggtaggggaagac ctcaacgacaggtgccc	3024 3025 3026 3027
human v-MYC	2	Probe Invader Stacker Arrestor	CCGTACAGCCCTCCGGCAAGG NH2 TGCTATGGGCAAGTTTCGTGGATGA ttgcggaccgctg ccctfcccggaggc	3028 3029 3030 3031
human v-MYC	2	Probe Invader Stacker Arrestor	CCGTACAGCCCTCCGGGTGTGTA NH2 GAGAGTCGCGTCCTTGCTA agttccagtgcaaat tacaacacccggaggc	3032 3033 3034 3035
human v-MYC	2	Probe Invader Stacker Arrestor	CCGTACAGCCCTCTTGTGCTGATGT NH2 GAGGGAGGCGCTGCGTAGA gtggagacgtggcac acatcagcacagaggc	3036 3037 3038 3039
human v-MYC	1	Probe Invader Stacker Arrestor	AACGAGGCGCACTCGGAGGTCA NH2 GGCTGCACCGAGTCGTAGA tagttccctgtgtggaag tgacctcgagtgccc	3040 3041 3042 3043

human v-MYC	1	Probe Invader Stacker Arrestor	AACGAGGCGCACATGCGGCA NH2 TGCTATGGGCAAGTTTCGTGGC agggtgcggaccg tgccgcaltgcgc	3044
				3045
				3046
				3047
human v-MYC	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCTGCTGGTG NH2 TGTTCTCTCCTCAGAGTCGA gtggcgggtgtct caccagcagggtgcgc	3048
				3049
				3050
				3051
human v-MYC	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCCAGTGGGC NH2 CGTGGCACCTCTTGAGGAA tgtgaggagggttgct cccactgggtgcgc	3052
				3053
				3054
				3055

Secondary system:		Oligo Sequence (5' to 3')		SEQ ID NO:
FRET probe	Secondary Reaction Template	RR-CTC-Z28-TTC TCA GTG CG	CGC AGT GAG AAT GAG GTG ATC TCG GCg gt	
Analyte Human GAPDH	Oligo Type	Oligo Sequence (5' to 3')		SEQ ID NO:
	Probe	5'-CCG CCG AGA TCA CGT AGT TGA GGT CAA TGA AG-NH2-3'		3058
	Invader	5'-gga atc ata ttG GAA CAT GTA AAC CAT C-3'		3059
	Arrestor	5'-ctt cat tga cct caa cta cgt gat ct-3'		3060
Mouse/Rat GAPDH	Probe	5'-CCG CCG AGA TCA CGT AGT TGA GGT CAA TGA AG-NH2-3'		3058
	Invader	aga atc ata ctG GAA CAT GTA GAC CAT C		3061
	Invader	gga gtc ata ctG GAA CAT GTA GAC CAT C		3062
	Arrestor	5'-ctt cat tga cct caa cta cgt gat ct-3'		3060
mFabp4	Probe	CCGCCGAGATCACCCATCCCACT NH2		3063
	Invader	CATCTCGTTTTCTCTTTATTGTCGACTTTTA		3064
	Stacker	tctgcacctgcacc		3065
	Arrestor	gtgggatgggtgac		3066
mFabp4	Probe	CCGCCGAGATCACCCATCCCACT NH2		3067
	Invader	cgtttctcTTTATTGTCGACTTTTA		3068
	Stacker	ttctgcacctgcac		3069
mFabp4	Probe	CCGCCGAGATCACCTTCTGCACC NH2		3070
	Invader	CTTTATTGTCGACTTTCCATCCCAA		3071
	Stacker	tgcaccagggcc		3072
	Arrestor	ggtgcagaaggtgac		3073

mFabp4	Probe Invader Stacker Arrestor	CCGCCGAGATCACACCAGGGC NH2 CCATCCACCTCTGCACCTGA ccgccatctagg ccctgggtggtgac	3074 3075 3076 3077
mFabp4	Probe Invader Stacker Arrestor	CCGCCGAGATCACCGAATTCACG NH2 TCCTGTCTCTGCGGTGATTTTCATA cccagttgaaggaaatct cglggaattcgtgac	3078 3079 3080 3081
mFabp4	Probe Arrestor	CCGCCGAGATCACCGAATTCACGC NH2 ccagttgaaggaaatctcg	3082 3083
mFabp4	Probe Invader Stacker Arrestor	CCGCCGAGATCACCATCGAATTCACG NH2 CTTCTGTCTCTGCGGTGATTTA cccagttgaaggaaatct gtggaattcgatggtgac	3084 3085 3086 3087
rRPS29	Probe Invader Arrestor	CCGCCGAGATCACCCGAACTTCCGCG-NH2 GCAAGAGCGAGAACCCCTGGA cgggaagttcgggtgac	3088 3089 3090
rRPS29	Probe Invader Arrestor	CCGCCGAGATCACGCAAGAGCGAGAACCC-NH2 GGCGGTTAGAGCAGACGCGC ggttctcgtcttgcgtgac	3091 3092 3093
rRPS29	Probe Invader Arrestor	CCGCCGAGATCACGCCCTATGTCCTTC-NH2 TCAGGTCGCTTAGTCCAACTTAATGAAC gaaggacataggcgtgac	3094 3095 3096

rRPS29	Probe	CCGCCGAGATCACGTCGCTTAGTCC-NH2	3097
	Invader	GGTAGACAGTCGAATCATCCATTCAGC	3098
	Arrestor	ggactaagcgacgtgac	3099
rat RPS29	Probe	5'-CCGCCGAGATCACGCCCTATGTCCTT NH2-3'	3100
	Invader	5'-AGGTCGCTTAGTCCAACTTAATGAAC-3'	3101
	Stacker	5'-cgctactgacggaagcacgtgc-3'	3102
	Arrestor	5'-aaggacataggcggtgac-3'	3103
human RPL5	Probe	5'-CCGCCGAGATCACGCTCCGATGTACT NH2-3'	3104
	Invader	5'-GCATGTAATCTGCAACATTCTGGCCCATGATGTA-3'	3105
	Stacker	5'-TCTGCATTAAATTCCTTGCTTTCAGAATCATACCAGGG-3'	3106
	Arrestor	5'-agtacatcggaagcggtgac-3'	3107
human RPL5	Probe	5'-CCGCCGAGATCACGCTTCCGA NH2-3'	3108
	Invader	5'-GCAACATTCTGGCCCATGATGT-3'	3109
	Stacker	5'-tgtactctgcattaaattcct-3'	3110
	Arrestor	5'-tcggaagcggtgac-3'	3111
hACT	Probe	CCGCCGAGATCACTGGGTCATCTTCT-NH2	3112
	Invader	GGGTGTTGAAGGTCTCAAACATGATCA	3113
	Arrestor	agaagatgacccagtgac	3114
hACT	Probe	CCGCCGAGATCACAGCAGCCGTGG-NH2	3115
	Invader	CCAGGGAGGAGCTGGAC	3116
	Arrestor	ccacggctgctgac	3117
r/m ACT	Probe	CCGCCGAGATCACTGGGTCATCTTTT-NH2	3118
	Invader	GGGTGTTGAAGGTCTCAAACATGATCA	3119
	Arrestor	aaaagatgacccagtgac	3120

r/m ACT	Probe Invader Stacker Arrestor	CCGCCGAGATCACTGGGTCATC-NH2 GGGTGTTGAAGGTCTCAAACATGATCA ttttcacggttgcc gatgaccacagtgatc	3121 3122 3123 3124
hHPRT	Probe Invader Stacker Arrestor	CCGCCGAGATCACATAGCTCTTCA-NH2 CCCCCTGTTGACTGGTCATTACAC gtctgataaaatctacagtcattagg tgaagagctatgtgatc	3125 3126 3127 3128
hHPRT	Probe Invader Stacker Arrestor	CCGCCGAGATCACTTTGAACAAGTTGG-NH2 GGGAACCTGCTGACAAAGATTCACTGGTAATAAA aaaatacagtcacattactgaaacactact ccaactgttcaaagtgatc	3129 3130 3131 3132
hPGK	Probe Invader Stacker Arrestor	CCGCCGAGATCACCTGGTTGTTT-NH2 GGACAGCAGCCTTAATCCTA gttatcgtgtgtcttca aaacaaccagggtgatc	3133 3134 3135 3136
hPGK	Probe Invader Stacker Arrestor	CCGCCGAGATCACACCGACTT-NH2 CCTAGGTGGCTCATAAGGACTC ggctccattgtcca aagtcgggtgtgatc	3137 3138 3139 3140

hPGK	Probe	CCGCCGAGATCACCCCATCCA-NH2	3141
	Invader	CTTTCAGGACCACAGTCCAAGA	3142
	Stacker	gccagcaggatgc	3143
	Arrestor	tgatggggatgc	3144
hRPL19	Probe	CCGCCGAGATCACCTTCCTTGG-NH2	3145
	Invader	CTCTTCACGGCGCTTGCGTGA	3146
	Stacker	tccttagacctgcgagcc	3147
	Arrestor	ccaaggaaggatgc	3148
r/m RPL19	Invader	CTCCCGGGCGCTTTCGTGA	3149
	Stacker	tccttagacctgcgagcc	3150
hRPL19	Probe	CCGCCGAGATCACTGCTTCCTTG-NH2	3151
	Invader	GCTCTTCACGGCGCTTGCGGA	3152
	Stacker	gtcttagacctgcgagcc	3153
	Arrestor	caaggaagcagtgatc	3154
r/m RPL19	Invader	CCTCCCGGGCGCTTTCGA	3155

Analyte	Oligo Type	Oligo Sequence (5' to 3')	SEQ ID NO:
Human GAPDH	Probe	CCGCCGAGATCACGATGATCTTGAGGCT-NH ₂	182
	Invader	TGGTGCAGGAGGCATTGCTC	183
	Arrestor	agcccaagatcatcgatct	3156
	FRET probe	Cy5-CTC-(Z28)-TTCTCAGTGCG	3157
	SRT	CGC AGT GAG AAT GAG GTG ATC TCG GCg gt	173
	FRET probe	Cy5-CAC-(Z28)-TGCTTCGTGG	3158
	SRT	CCAGGAAGCAAGTGGTGATCTCGGCggt	3159
Human Ubiquitin	Probe	CGCCGAGATCACCTTTACATTTTCTATCGT-NH ₂	169
	Invader	CCTTCCTTATCCTGGATCTTGGA	170
	Arrestor	acgatagaaaatgtaaaggatgc	171
	FRET probe (Epoch yellow dye)	Z38-CTC-(Z28)-TTCTCAGTGCG	3160
	FRET probe (Epoch yellow dye)	550-CTC-(Z28)-TTCTCAGTGCG	3161
	SRT	CGC AGT GAG AAT GAG GTG ATC TCG GCg gt	173
Human CYP 3A7	Probe	5'-AAC GAG GCG CAC GTC ATA AAT ACC CC-NH2-3'	662
	Invader	5'-GCC AGC ATA GGC TGT TGA CAC-3'	663
	Stacker	agactttctatcttttataacattc	664
	Arrestor	ggggtatttatgacgigcgc	665
	FRET probe	F-TCC-(Z28)-ACTCCGAGCT	3162
	FRET probe	RR-TCC-(Z28)-ACTCCGAGCT	3163
	SRT	AGC TCG GAG TAG GAG TGC GCC TCG tt	3164
	SRT	AGC ACG GAG TAG GAG TGC GCC TCG tt	3165
	SRT	AGC CCG GAG TAG GAG TGC GCC TCG tt	3166
	SRT	AGC GCG GAG TAG GAG TGC GCC TCG tt	3167
	FRET probe	FL-CAC-Z28-TGC TTC GTG G	189
	SRT (Epoch)	AGC GCG GAG TAG GAG TGC GCC TCG TTT	3168
	SRT (Epoch)	CC(A30) GGA AGC AAG TGG TGC GCC TCG TTT-Hex	3169
	SRT (Epoch)	CC(A30) GGA AGC AAG TGG TGC GCC TCG T(U33)T-Hex	3170
	SRT (Epoch)	CC(A30) GG(A30) AGC AAG TGG TGC GCC TCG T(U33)T-Hex	3171
	SRT (Epoch)	CC(A30) GG(A30) (A30)GC AAG TGG TGC GCC TCG T(U33)T-Hex	3172
	SRT (Epoch)	CC(A30) GG(A30) (A30)GC (A30)AG TGG TGC GCC TCG T(U33)T-Hex	3173
	SRT (Epoch)	CC(A30) GG(A30) (A30)GC (A30)(A30)G TGG TGC GCC TCG T(U33)T-Hex	3174

rat CYP2B2	2	Probe Probe Invader Stacker Stacker Arrestor Arrestor Arrestor	5'-CCG TCA CGC CTC AGA GCC AAT CAC-NH2-3' 5'-CCG TCA CGC CTC AGA GCC AAT CAC-HEX-3' 5'-CGA TCA TCA AGG GAT GGT GGC CTG TGC-3' 5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G-3' 5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G HEX-3' 5'-gtgattggctctgaggcg -3' 5'-gtgattggctctgaggcg HEX-3' 5'-gtgattggctctgaggcg -3'	679 3187 680 681 3188 682 3189 3190
human CYP2B6	2	Probe Probe Invader Stacker Stacker Arrestor Arrestor Arrestor	5'- CCG TCA CGC CTC CAC CAT ATC CC-NH2-3' 5'- CCG TCA CGC CTC CAC CAT ATC CC-HEX-3' 5'-CCA GCG GTT TCC ATT GGC AAA GAT CAA-3' 5'-cggaagaatgggtcgaccatg-3' 5'-cggaagaatgggtcgaccatg HEX-3' 5'-gggatatggtggaggcg-3' 5'-gggatatggtggaggcg HEX-3' 5'-gggatatggtggaggcg -3'	638 3191 639 640 3192 641 3193 3194
rat CYP4A3	1	Probe Invader Stacker Stacker Arrestor Arrestor	5'-AAC GAG GCG CAC TTG ACA GAG TCC-NH2-3' 5'-GCT TCT CCC ATT TGT CTA GCA TTA TAA-3' 5'-GCC ATG ATT TTG ACA TAG GGT TTG AGG ATG-3' 5'-GCC ATG ATT TTG ACA TAG GGT TTG AGG ATG HEX-3' 5'-ggactctgtcaagtgccg-3' 5'-ggactctgtcaagtgccg HEX-3'	1454 1459 1460 3195 1458 3196

human NR112	1	Probe	5'- AACGAGGGCGCACGCAACTCGCA NH2-3'	3197
		Probe	5'- AACGAGGGCGCACGCAACTCGCA HEX-3'	3198
		Probe	5'- AACGAGGGCGCACGCAACTCGCA 3-morpholino 1,2-propanediol-3'	3199
		Probe	5'- AACGAGGGCGCACGCAACTCGCA 1,2-octanediol-3'	3200
		Probe	5'- AACGAGGGCGCACGCAACTCGCA methoxyphenyl-3'	3201
		Probe	5'- AACGAGGGCGCACGCAACTCGCA amine(C3)-3'	3202
		Probe	5'- AACGAGGGCGCACGCAACTCGCA amine(C6)-3'	3203
		Invader	5'- GGCCTGCAGAGACTCTGC -3'	3204
		Stacker	5'- gccactgtaagcac -3'	3205
		Arrestor	5'- tgcgagtgcgtagcgc -3'	3206
		Probe	5'- AAC GAG GCG CAC CTC CAA TCT CA NH2-3'	3207
		Probe	5'- AAC GAG GCG CAC CTC CAA TCT CA HEX-3'	3208
human ABCC2	1	Probe	5'- AAC GAG GCG CAC CTC CAA TCT CA 3-morpholino 1,2-propanediol-3'	3209
		Probe	5'- AAC GAG GCG CAC CTC CAA TCT CA 1,2 octanediol-3'	3210
		Probe	5'- AAC GAG GCG CAC CTC CAA TCT CA methoxyphenyl-3'	3211
		Probe	5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C3)-3'	3212
		Probe	5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C6)-3'	3213
		Invader	5'- CCC CCA CTA AGA TTT ATA CCC TTC TA -3'	3214
		Stacker	5'- gcc aaa tct cct cca -3'	3215
		Arrestor	5'- tga gat tgg agg tgc gc -3'	3216

Secondary system		Oligo Sequence (5' to 3')		SEQ ID NO
FRET probe		FL-CAC-Z28-TGC TTC GTG G		3217
Secondary Reaction Template 1		CCA GGA AGC AAG TGG TGC GCC TCG tt		3218
Secondary Reaction Template 2		CCA GGA AGC AAG TGG AGG CGT GAC ggt		3219
Secondary Reaction Template 3		CCA GGA AGC AAG TGA CGC AGC GAC ggt		3220
Assay	SRT #	Oligo Type	Oligo Sequence (5' to 3')	SEQ ID NO
Human CYP 2B6	1	Probe	AACGAGGCGCACCCACCATATCC-NH ₂	3221
		Invader	CCAGCGGTTTCCATTGGCAAAGATCAA	639
		Stacker	ccggaagaatgggtcgaccatg	3222
		Arrestor	ggatatgtgtggtgcgc	3223
		Stacker	ccggaagaatgggtcgac	3224
Human CYP 2B6 e6	2	Probe	CCGTCACGCCTCGGTTGAGGTTT-NH ₂	3225
		Invader	CAGCAAAAGAAGAGCGAGAGCGTGTGAC	1911
		Stacker	tggggcgtgaattcactgtg	3226
		Arrestor	gaaccitcaaccgagggcg	3227
	2	Stacker	tggggcgtgaattcact	3228
		Probe	CCGTCACGCCTCGGTTGAGGTTT-NH ₂	3229
		Stacker	ctgggtgctgaattcactgtg	3230
		Arrestor	aaccitcaaccgagggcg	3231
Human CYP 2E1	1	Stacker	ctgggtgctgaattcac	3232
		Probe	AACGAGGCGCACCCGAGCCCA-NH ₂	3233
		Invader	GCATCACCCACCATGCGCTGA	3234
		Stacker	cgtacagcgtgaacaccg	3235
		Arrestor	gcataccaccatgcgctga	3236

1	Probe	AACGAGGCGCACCCCTGAGTGC-NH ₂	3237
	Invader	GCTGGCCTTGGGTCTTA	3238
	Stacker	ttcagcaggaagtg	3239
	Arrestor	gcactcaggggtgcgc	3240
1	Probe	AACGAGGCGCACCCACGAGCA-NH ₂	3241
	Invader	CTGTGCTTTTCTCTCCATTTA	3242
	Stacker	ggcagtcggtgagg	3243
	Arrestor	tgctcgtgggtgcgc	3244
1	Probe	AACGAGGCGCACCTTGGCACTAC-NH ₂	3245
	Invader	GGTTGTCATACAAAACAGAGTCCAGAGA	3246
	Invader	gtcatacaaaacaGAGTCCAGAGA	3247
	Stacker	gactgtgcccttgg	3248
	Arrestor	gtagtccaagtgcgc	3249
1	Probe	AACGAGGCGCACCTTGGCAGACA-NH ₂	3250
	Invader	gtacagaaatgagggcaAAAAGATGAGA	3251
	Stacker	ctcagcagaaggatgg	3252
	Arrestor	tgctcgtccaagtgcgc	3253
	Stacker	ctcagcagaggatgg	3254
2	Probe	CCGTACACGCCTCTTGGCAGGACA-NH ₂	3255
	Arrestor	tgctcgtccaagaggcg	3256
1	Probe	AACGAGGCGCACCTTGGCAGGAC-NH ₂	3257
	Stacker	actcagcagaaggatgg	3258
	Arrestor	gtcctgtccaagtgcgc	3259
1	Probe	AACGAGGCGCACCTTGGCAGGA-NH ₂	3260
	Stacker	cactcagcagaaggatgg	3261
	Arrestor	tcctgtccaagtgcgc	3262

Rat CYP 4A2

Rat CYP 4A2	1	Probe	AACGAGGCGCACCCGATTGTCC-NH ₂	3263
		Invader	gatttctagaacattttaATTCATGATGA	3264
		Stacker	caagactctgagaactgaagg	3265
	2	Arrestor	ggacaatcgggtgcgc	3266
		Probe	CCGTCACGCCTCCCGATTGTCC-NH ₂	3267
		Arrestor	ggacaatcgggagcg	3268
Rat CYP 4A2	1	Probe	AACGAGGCGCACTACTATTATTTTCATAG-NH ₂	3269
		Invader	CATTTCTATCTACTGTTCTGCATCAGA	3270
		Stacker	aaaagatgaggcatataatttc	3271
		Arrestor	ctatgaaataatagtagtcgc	3272
	1	Probe	AACGAGGCGCACTACTATTATTTTCATAG-NH ₂	3273
		Stacker	aaagatgaggcatataatttc	3274
		Arrestor	tctatgaaataatagtagtcgc	3275
	2	Probe	CCGTCACGCCTCTACTATTATTTTCATAG-NH ₂	3276
		Arrestor	tctatgaaataatagtagagcg	3277
Rat CYP 4A2	1	Probe	AACGAGGCGCACAGGTGTCTGGAG-NH ₂	3278
		Invader	GGTCCACGCACAAAGCTGGGAC	3279
		Stacker	taaaagctacagaaatgagggc	3280
		Arrestor	ctccagacacctgtgcgc	3281
	2	Probe	CCGTCACGCCTCAGGTGTCTGGAG-NH ₂	3282
		Arrestor	ctccagacacctgagcg	3283
	1	Probe	AACGAGGCGCACAGGTGTCTGGAGT-NH ₂	3284
		Stacker	aaaagctacagaaatgagggc	3285
		Arrestor	actccagacacctgtgcgc	3286

Rat CYP Pan 3A	2	Probe	CCGTCACGCCCTCGTTCCTGGG-NH ₂	2028
		Invader (degenerate)	GAGCAAACTCATGYCAATRCAC	3287
		Stacker (degenerate)	tccattYccaaagggcag	3288
		Arrestor	cccagggaacgaggcg	2034
Rat CYP 4A3	1	Probe	AACGAGGCGCACCTTTTGCTCCC-NH ₂	3289
		Invader	GGTCATAGAGCAGGACTCGTGA	3290
		Stacker	tgagagccactgtaag	3291
		Arrestor	gggagcaaaagtgcgc	3292
	2	Probe	CCGTCACGCCCTCTTTTGCTCCC-NH ₂	3293
		Arrestor	gggagcaaaagaggcg	3294
Rat CYP 4A3	1	Probe	AACGAGGCGCACGTTGTGATACCTT-NH ₂	3295
		Invader	gatgaaggccataaattAAAAATTGTGC	3296
		Stacker	tgggtatggaacgtcc	3297
		Arrestor	aaggtatcacacgtgcgc	3298
	2	Probe	CCGTCACGCCCTCGTTCGTTGTGATACCTT-NH ₂	3299
		Arrestor	aaggtatcacacgaggcg	3300
	1	Probe	AACGAGGCGCACCTTTGTGATACCTTT-NH ₂	3301
		Invader	gatgaaggccataaattAAAAATTGTGGA	3302
		Stacker	gggtatggaacgtccat	3303
		Arrestor	aaaggtatcacacgtgcgc	3304
	2	Probe	CCGTCACGCCCTCTTTGTGATACCTTT-NH ₂	3305
		Arrestor	aaaggtatcacacgaggcg	3306

Rat CYP 4A3	1	Probe	AACGAGGCGCACCCATAGGGACC-NH ₂	3307
		Invader	CCATTCTTGGACTTCAACACAAAGTCTTGA	3308
		Stacker	gggatcctggtgg	3309
		Arrestor	ggtccctatgggtgcgc	3310
		Probe	CCGTCACGCTCCCATAGGGACC-NH ₂	3311
	2	Arrestor	ggtccctatgggtgcgc	3312
Rat CYP 4A3	1	Probe	AACGAGGCGCACATGACGGGACAC-NH ₂	3313
		Invader	GCTACAGAAATGAGGGCAAAAAAATGAGC	3314
		Stacker	tcagcagaggatggg	3315
		Arrestor	gtgccgcatgtgcgc	3316
		Probe	CCGTCACGCTCATGACGGGACAC-NH ₂	3317
	2	Arrestor	gtgccgcatgtgcgc	3318
Human/Mouse HES-1	1	Probe	AACGAGGCGCACCTGACTTTCTGTG-NH ₂	3319
		Invader	CGTCTTTTCTCCATAATAGGCTTTTGAA	3320
		Stacker	atcagatgctgtcttgg	3321
		Arrestor	cacagaaagtcagtcgcgc	3322
		Stacker	gtcagatgctgtcttgg	3323
		Stacker	ctaagatgctgtcttgg	3324
		Stacker	ctgagatgctgtcttgg	3325
		Stacker	atcagaggccgtcttgg	3326
		Stacker	atcagaggccgtcttgg	3327
rat HSP70-1,2	1	Probe	5'- AAC GAG GCG CAC CCG GTT CTC NH2-3'	3328
		Invader	5'- GAT CTC CTC CGG GTA GAA CGA A -3'	3329
		Stacker	5'- gcc ctt gta gtt cac -3'	3330
		Arrestor	5'-gag aac cgg gtg cgc -3'	3331
		Probe	AACGAGGCGCACACTCGAAGC-NH ₂	3332
rat HSP70-1,2	1	Invader	GGCGGGATGCCGCTCAC	3333
		Stacker	gccccagcagg	3334
		Arrestor	gtctcgagtgctgcgc	3335

rat HSP70-1,2	1	Probe	AACGAGGCGCACGGTACGCCT-NH ₂	3336
		Invader	CACCGGGTGGCCAC	3337
		Stacker	cgcgatctcttca	3338
		Arrestor	aggcgaccggtgcgc	3339
	1	Probe	AACGAGGCGCACGGTACGCCTC-NH ₂	3340
		Stacker	ggcgatctcttcat	3341
		Arrestor	gaggcgaccggtgcgc	3342
	2	Probe	CCGTACAGCCTCGGTACGCCTC-NH ₂	3343
		Arrestor	gaggcgaccggtgcgc	3344
	1	Probe	AACGAGGCGCACGTACGCCTC-NH ₂	3345
		Invader	ACCGGGTGGCCACG	3346
		Arrestor	gaggcgaccggtgcgc	3347
	3	Probe	CCGTGCTGCGTGCTCAACTC-NH ₂	3348
		Invader	GCCGGCGGGATGCCC	3349
		Stacker	gaagcgcccgag	3350
		Arrestor	gagttgagcacgcagc	3351
	1	Probe	AACGAGGCGCACGCCATG-NH ₂	3352
		Invader	GCGATCTCCTTCATCTTGGTA	3353
		Invader	CAGTCTCCTTCATCTTGGTA	3354
		Stacker	gcgatctctctcatctfgta	3355
rat HSP70-1,2,3		Arrestor	catggcggtggtgcgc	3356
	1	Probe	AACGAGGCGCACGCCATGCCCC-NH ₂	3357
		Invader	CAGGTTGTTGTGCGCGGTA	3358
		Invader	GAGGTTGTTGTGCGCGGTA	3359
		Stacker	tcgcgcctcgta	3360
		Arrestor	gggcatgtgtgcgc	3361

rat HSP70-1,2,3	1	Probe	AACGAGGCGCACCTGGATCA-NH ₂	3362
		Invader	CCCTCTCGCCCTCGTAA	3363
		Stacker	gcacccgggc	3364
		Arrestor	tgatccagggtgtgcgc	3365
rat HSP70-1,2,3	1	Probe	AACGAGGCGCACTCAGCACCA-NH ₂	3366
		Invader	GGCGATCTCCTTCATCTTGA	3367
		Invader	TGCAGTCTCCTTCATCTTGA	3368
		Stacker	tggacgagatctctc	3369
		Arrestor	tggtgtgagtgcgc	3370
Human AGC 1,2	1	Probe	AACGAGGCGCACCCACTAGCTC-NH ₂	3371
		Invader	AGTTCAGTTCCTGAAGGGAGTA	3372
		Stacker	tccactaatgtccagc	3373
		Arrestor	gagctagtgggtgcgc	3374
Human AGC 1,2	1	Probe	AACGAGGCGCACCCCTTGTCTC-NH ₂	3375
		Invader	CGTCTCACACCCAGGAACTCATA	3376
		Stacker	catagcagccttc	3377
		Arrestor	gagacaagggtgcgc	3378
rat GRM1	1	Probe	AACGAGGCGCACCTTCTCATCTC-NH ₂	3379
		Invader	GCATCGGTTACGCCCATCA	3380
		Stacker	ggatggaaatcaggaggt	3381
		Arrestor	gagatgagaagggtgcgc	3382
	2	Probe	CCGTCACGCCTCCTTCTCATCTC-NH ₂	3383
		Arrestor	gagatgagaaggagggcg	3384
	3	Probe	CCGTGCTGCGTCTTCTCATCTC-NH ₂	3385
		Arrestor	gagatgagaagacgcag	3386

rat GRM1	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCCCTTCTCATC-NH ₂	3387
			GCATCGGTTCAGCCCAT	3388
			tcggatgaaatcaggag	3389
			gatgagaagggtgcgc	3390
			CCGTCACGCCTCCCTTCTCATC-NH ₂	3391
	2	Probe Arrestor	gatgagaaggaggcg	3392
rat GRM2	1	Probe Invader Arrestor	AACGAGGCGCACGAGAGATGAGGAGAGGG-NH ₂	3393
			GGCCAGGAAAGGACAGACAGGAAA	3394
			ccctctcatctctcgtgcgc	3395
rat GRM2	1	Probe Invader Arrestor	AACGAGGCGCACGAGAGATGAGGAGAGG-NH ₂	3396
			GCCAGGAAAGGACAGACAGGAAC	3397
			cctctctcatctctcgtgcgc	3398
rat GRM5	1	Probe Invader Stacker Arrestor	AACGAGGCGCACTGGAGGAACTCAG-NH ₂	3399
			ggaattcaagctaataaaGATATCATGAA	3400
			agctccaataggtagcgc	3401
			ctgagttctcctcagtgccgc	3402
rat GRM5	1	Probe Invader Stacker Arrestor Stacker	AACGAGGCGCACTCCTTTCCAAG-NH ₂	3403
			CAAGAGTGTGGGATCTGAGTTGAA	3404
			gtatgcagcatggcc	3405
			cttgaaaggagtgccgc	3406
			gtatgcagcatggccctc	3407
rat GRM5	1	Probe Invader Stacker Arrestor Invader	AACGAGGCGCACTCGGCCCA-NH ₂	3408
			CCATCTGTACGTCATACCTGA	3409
			gccatcactgccc	3410
			tggccgagtgccgc	3411
			ccatctgtcacGTCATACCTGA	3412

rat GRM7	1	Probe	AACGAGGCGCACGTCCTGTGC-NH ₂	3413
		Invader	AGTCTTTTCCAATTGCTCCTC	3414
		Stacker	attgcgatctgtcttc	3415
		Arrestor	gcacaggacgtgcgc	3416
		Probe	CCGTCACGCTCGTCCTGTGC-NH ₂	3417
		Arrestor	gcacaggacgaggcg	3418
rat TAC1	1	Probe	AACGAGGCGCACCTTCTTCATAAG-NH ₂	3419
		Invader	CTTCTTTTCGTAGTTCGCAATGCGA	3420
		Stacker	ccacagaattaaagctctttg	3421
		Arrestor	cttatgaaagaaggcg	3422
		Probe	CCGTCACGCTCCTTCTTCATAAG-NH ₂	3423
		Arrestor	cttatgaaagaaggcg	3424
rat CYP 7A1	2	Probe	CCG TCA CGC CTC GTC TTG GCC-NH ₂	3425
		Invader	5' GCC CAG AGA ATA GCG AGG TGC A 3'	3426
		Stacker	5' ttc tcc atg tgc tca aag gtc g 3'	3427
		Arrestor	5' ggc caa gac gag ggc 3'	3428
human PPAR-alpha	1	Probe	AACGAGGCGCACCTTTCAGTTTG-NH ₂	3429
		Invader	TCTATGTCATGTTTCACAGGTAAGAAATTTCTGA	3430
		Stacker	cttctcagatcttggc	3431
		Arrestor	caaaactgaaaggcg	3432
	2	Probe	CCGTCACGCTCCTTTCAGTTTG-NH ₂	3433
		Arrestor	caaaactgaaaggcg	3434

Assays	SRT #	Oligo Type	Secondary system	Oligo Sequence (5' to 3')	SEQ ID NO
rat GPCR/CNS2	1	Probe	FRET probe	FL-CAC-Z28-TGC TTC GTG G	3435
		Invader	Secondary Reaction Template 1	CCA GGA AGC AAG TGG TGC GCC TCG tt	3436
		Stacker	Secondary Reaction Template 2	CCA GGA AGC AAG TGG AGG CGT GAC ggt	3437
		Arrestor	Secondary Reaction Template 3	CCA GGA AGC AAG TGA CGC AGC GAC ggt	3438
human P53AIP1	1	Probe		5'- AACGAGGGCGCACCCAGGTGTG-NH2-3'	3443
		Invader		5'-TCACTGCAGGGACTTACCCAGA- 3'	3444
		Stacker		tggtctgagccc	3445
		Arrestor		acacctgggtgcgc	3446
human P53AIP1	1	Probe		AACGAGGGCGCACCCAGGTGT NH2	3447
		Stacker		gtgtctgagccc	3448
		Probe		AACGAGGGCGCACCCCTTCCTCT NH2	3449
		Invader		GGAGGAGGAGGGGCTGGA	3450
human P53AIP1	1	Stacker		tggactattgacaggg	3451
		Arrestor		agaggaaaggtgcgc	3452
human P53AIP1	1	Probe		AACGAGGGCGCACCTTCATTATTGGC NH2	3453
		Invader		CCACAAGCTTCCGAGTGCGTCATA	3454
		Stacker		cacaggaacgactcttgg	3455
		Arrestor		gccataatgaaggtgcgc	3456

human P53AIP1	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCGCTGCGT NH2 GGCCCTGCACCTCAGAA gtgagcttctg99g acgcagcgggtgcgc	3457 3458 3459 3460
mouse LLPL	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCTGTCCGTC NH2 CAGATTACGCCAGAGTGTAAGTAGA ttcttgagcaaaaggtag agacggacagggtgcgc	3461 3462 3463 3464
	1 Probe Stacker	AACGAGGCGCACCTGTCCGTCT NH2 tcttgagcaaaaggtagt	3465 3466
mouse LLPL	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCCAGAGTGTG NH2 GCAGAAGCAGTTCCAGATTTCAGA aagtagctgtccgtct cacactcgggtgcgc	3467 3468 3469 3470
	1 Probe Stacker	AACGAGGCGCACCCAGAGTGT NH2 gaagtagctgtccgtc	3471 3472
mouse LLPL	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCCAGAAAGTAGAGCA NH2 AGACTTGTGGCTGCCGCTGA tgtacacgttgcccatg tgctctacttctggtgcgc	3473 3474 3475 3476

Secondary system		Oligo Sequence (5' to 3')		SEQ ID NO
FRET probe		FL-CAC-Z28-TGC TTC GTG G		3477
Secondary Reaction Template 1		CCA GGA AGC AAG TGG TGC GCC TCG tt		3478
Secondary Reaction Template 2		CCA GGA AGC AAG TGG AGG CGT GAC ggt		3479
Secondary Reaction Template 3		CCA GGA AGC AAG TGA CGC AGC GAC ggt		3480
Assays mArbp	SRT #	Oligo Type	Oligo Sequence (5' to 3')	SEQ ID NO
	1	Probe	AACGAGGCGCACCATGCGGATCT NH2	3481
		Invader	gcctccCTCGGAGCGAA	3482
		Stacker	gctgcatctgttga	3483
		Arrestor	agatccgcatggtgcgc	3484
mArbp	1	Probe	AACGAGGCGCACCTGCACATCAC NH2	3485
		Invader	CACCTTGTCGCCAGTCTTTATCAGA	3486
		Stacker	tcagaattcaatggtgcc	3487
		Arrestor	gtgatgtgcagggtgcgc	3488
mArbp	1	Probe	AACGAGGCGCACCTGCACATCACT NH2	3489
		Stacker	cagaattcaatggtgcct	3490
mArbp	1	Probe	AACGAGGCGCACCTCCACAGACAA NH2	3491
		Invader	CAGTAAGTGGGAAGGTGTACTCAGTA	3492
		Stacker	tgccaggacgcgct	3493
		Arrestor	ttgtctgtggagggtgcgc	3494
mArbp	1	Probe	AACGAGGCGCACCTCCAGGTG NH2	3495
		Invader	TCTCCAGAGCTGGGTGTTA	3496
		Stacker	gccccgtatagcc	3497
		Arrestor	acctggagggtgcgc	3498

mArbp	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCATGCGGATCTG NH2 GCCTTCCCTCGGAGCGAA ctgcatctgttgag cagatccgcatgtgtgagc	3499 3500 3501 3502
mArbp	1	Probe Invader Stacker Arrestor	AACGAGGCGCACACATGCGGATCT NH2 GCCTTCCCTCGGAGCGC gctgcatctgttg agatccgcatgtgtgagc	3503 3504 3505 3506
rABCB11	2	Probe Invader Stacker Arrestor	CCGTACGCGCTCCCATATTGCTACA NH2 TTGTCCCGTACTTGATGTTGTA gtcaaacagcactggc ttagcataatggaggcg	3507 3508 3509 3510
rABCB11	1	Probe Arrestor	AACGAGGCGCACCCATTATGCTACA NH2 ttagcataatgggtgagc	3511 3512
rABCB11	1	Probe Invader Stacker Arrestor	AACGAGGCGCACGAGACAATCC NH2 GTCAAACAGCAC TGGCTCCTGC cgaatgtggaacggaggaaac ggattgtctcgtgagc	3513 3514 3515 3516
rABCB11	2	Probe Arrestor	CCGTACGCGCTCGGAGACAATCC NH2 ggattgtctcgtgagcg	3517 3518
rABCB11	1	Probe Invader Stacker Arrestor	AACGAGGCGCACGAGATTCCGTAT NH2 AGCCATATCCAGAGCAAGATCCTTGC gagggtcgggc atacgaatccgtgagc	3519 3520 3521 3522
rABCB11	2	Probe Arrestor	CCGTACGCGCTCGGATTCCGTAT NH2 atacgaatccgtgagcg	3523 3524

hAPOA1	1	Probe Invader Stacker Arrestor Probe Stacker	AACGAGGCGCACCTTCTGGC NH2 CTCTTGAGCTCGTGCAGA gcgcacctct gccagaaggtgcgc AACGAGGCGCACCTTCTGGCG NH2 cgccacctcttg	3525 3526 3527 3528 3529 3530
hAPOA1	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCGCTGTAGG NH2 GCTGGCGCAGCTCGTA gggccagatgcgt cctacagcgggtgcgc	3531 3532 3533 3534
hLCAT	1	Probe Invader Stacker Arrestor Probe Stacker	AACGAGGCGCACCTCAGCCTT NH2 GGCCGTGTGTGGTTACTGAGA gggcgtggtgctgc aaggctgaggtgcgc AACGAGGCGCACCTCAGCCTTG NH2 ggcgtggtgctgcg	3535 3536 3537 3538 3539 3540
hLCAT	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCGCTTGG NH2 CCGTGTGTGGTTACTGAGCTA gcgtggtgctgcgc ccaaggcgtggtgcgc	3541 3542 3543 3544
hIVL	1	Probe Invader Stacker Arrestor Probe Stacker	AACGAGGCGCACCGCTCCTTC NH2 GCTCCTGCTCCTGTGC tgctgtgctcacattc gaaggagcgtgcgc AACGAGGCGCACCGCTCCTTCT NH2 gcgtgtgctcacattct	3545 3546 3547 3548 3549 3550

hIVL	2	Probe Invader Stacker Arrestor	CCGTACGCCCTCGCTCCTTCTGC NH2 CAGCTCCTGCTCCTGTGC TGTTGCTCACATTCTTGCTCAGGC gcagaaggagcgaggcg	3551 3552 3553 3554
rGPR37	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCTGGACGTTG NH2 GGAAGAACAAATTTCAATCATTTTCATAGTACATA gtggcagcccg caacgtccagggtgcgc	3555 3556 3557 3558
rGPR37	1	Probe Invader Stacker Arrestor	AACGAGGCGCACATCATTTTCATAGTACA NH2 GGCAGTGGTGGAGAACAAATTTTCAC tctggacgttggtgg tgtactatgaaatgatgtgcgc	3559 3560 3561 3562
rGPR37	1	Probe Invader Stacker Arrestor	AACGAGGCGCACATCATTTTCATAGTACATCT-NH2 agttggcagtggtggaagaaCAATTTTCAG ggacgttggtggcagccc agatgtactatgaaatgatgtgcgc	3563 3564 3565 3566
rEsr2 (rER Beta)	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCTCTAGTGATCT NH2 CTCTCTGTTTACAGGTAAGGTGTGA tgctcacaccaaggac agaicactagagggtgcgc	3567 3568 3569 3570
rEsr2 (rER Beta)	2	Probe Invader Arrestor	CCGTACGCCCTCCTCTAGTGATCTTGCT-NH2 GTCCTCTGTTTACAGGTAAGGTGTGG agcaagatcactagaggaggcg	3571 3572 3573

Secondary system		Oligo Sequence (5' to 3')		SEQ ID NO
FRET probe		FL-CAC-Z28-TGC TTC GTG G		3574
Secondary Reaction Template 1		CCA GGA AGC AAG TGG TGC GCC TCG tt		3575
Secondary Reaction Template 2		CCA GGA AGC AAG TGG AGG CGT GAC ggt		3576
Secondary Reaction Template 3		CCA GGA AGC AAG TGA CGC AGC GAC ggt		3577
SRT # Oligo Type		Oligo Sequence (5' to 3')		SEQ ID NO
human PTGS2	1	Probe	5'-AACGAGGCGCACAGAGGTTAGAGAAAG-NH2-3'	3578
		Invader	5'-GGAGGAAGGGCTCTAGTATAATAGGC-3'	3579
		Stacker	5'-gctccagacttttagc -3'	3580
		Arrestor	5'-ctctctaacctctgtgcgc -3'	3581
human FACL1,2	2	Probe	5'-CCGTCACGCCCTCGTTGGCTCTTCCC-NH2-3'	3582
		Invader	5'-GGCTTGGGCTTCCGTCTC-3'	3583
		Arrestor	5'-gggaagagccaacgagggcg-3'	3584
rat RPS29	2	Probe	5'-CCGTCACGCCCTCGCCTATGTCTT NH2-3'	3585
		Invader	5'-AGGTCGCTTAGTCCAACCTTAATGAAC-3'	3586
		Stacker	5'-cgctactgaaggagcactgtc-3'	3587
		Arrestor	5'-aaggacataggcgagggcg-3'	3588
human RPL5	1	Probe	5'-AACGAGGCGCACGCTTCCGATGTACT NH2-3'	3589
		Invader	5'-GCATGTAACTGCAACATTCGGCCCATGATGTA-3'	3590
		Stacker	5'-TCTGCATTAAATTCCTTGCTTTCAGAAATCATAACCAGGG-3'	3591
		Arrestor	5'-agtacatcggaagcggtgcgc-3'	3592
	1	Probe	5'-AACGAGGCGCACGCTTCCGA NH2-3'	3593
		Invader	5'-GCAACATTCTGGCCCATGATGTC-3'	3594
		Stacker	5'-tgtactctgcattaaattcct-3'	3595
		Arrestor	5'-tcggaagcggtgcgc-3'	3596

mouse ABCA1	2	Probe	5' CCGTCACGCCTCCCGTTTTC-NH2 3'	3625
		Arrestor	5' gaaacgggaggcg 3'	3626
	1	Probe	5'-AACGAGGCGCACCCCGTTTTC NH2-3'	3627
		Arrestor	5'-gaaacggggtgcgc-3'	3628
		Invader	5' GGGCATCTGTTGCACGTAGACAA 3'	3629
		Stacker	5' ttctcagatccgctc 3'	3630
	2	Probe	5'-CCGTCACGCCTCCCGTTTTCT NH2-3'	3631
		Invader	5' GGGCATCTGTTGCACGTAGACAA 3'	3632
		Stacker	5'-tctcagatcccgctca-3'	3633
		Arrestor	5'-agaaaacgggaggcg-3'	3634
human ABCC2	1	Probe	5'- AAC GAG GCG CAC CTC CAA TCT CA NH2-3'	3635
		Invader	5'- CCC CCA CTA AGA TTT ATA CCC TTC TA -3'	3636
		Stacker	5'- gcc aaa tct cct cca -3'	3637
		Arrestor	5'-tga gat tgg agg tgc gc -3'	3638
	1	Probe	5'-AACGAGGCGCACTCGGACTGT NH2-3'	3639
		Invader	5'-GCCATAATGTCCAGGTTACATCA-3'	3640
		Stacker	5'-ggctccgaatcatgtt-3'	3641
		Arrestor	5'-acagtcgagtgcg-3'	3642
	1	Probe	5'-AACGAGGCGCACCAACCTGTTCA NH2-3'	3643
		Invader	5'-CATCCACTGTGGAAATATCGCCGGA-3'	3644
		Stacker	5'-caatccggcctgtg-3'	3645
		Arrestor	5'-tgaacagggttggtgcgc-3'	3646
human NR112	1	Probe	5'- AACGAGGCGCACGCAACTCGCA NH2-3'	3647
		Invader	5'- GGCCCTGCAGAGACTCTGC -3'	3648
		Stacker	5'- gccactgctaagcac -3'	3649
		Arrestor	5'- tgcgagttgcgtgcgc -3'	3650

1	Probe	5'-AACGAGGCGCACCCCTCTCTGA NH2-3'	3651
	Invader	5'-GCCTTTTAAAGGAAAGGGCAACCTTGA-3'	3652
	Stacker	5'-tggctctgacctaca-3'	3653
	Arrestor	5'-tcagagaggggtgcgc-3'	3654
1	Probe	5'-AACGAGGCGCACGATAGCCAG NH2-3'	3655
	Invader	5'-TGCATCCTTCACATGTCATGACATTGAAGTC-3'	3656
	Stacker	5'-tggccttgctccc-3'	3657
	Arrestor	5'-ctggctatcgtgcgc-3'	3658
1	Probe	5'-AACGAGGCGCACGCGAGTGTCT-3'	3659
	Invader	5'-AAGTTGCTGGAAGCCACCTC-3'	3660
	Stacker	5'-tccaagcagtaggaca-3'	3661
	Arrestor	5'-agacacgtgcgtgcgc-3'	3662
human ABCB1	Probe	5'- AAC GAG GCG CAC CAT CCA GAG NH2-3'	3663
	Invader	5'- CCT CCA AAA GGA AAC TGG AGG TAT ACT TTA -3'	3664
	Stacker	5'- cct ctt tgg tac taa gc -3'	3665
	Arrestor	5'- ctc tgg atg gtg cgc -3'	3666
1	Probe	5'-AACGAGGCGCACCTTCTATTAGTGA NH2-3'	3667
	Invader	5'-CAGATTCA TGAAGAACCCTGTATCATTTGATATCAA-3'	3668
	Stacker	5'-tgttgacatcagatcttctaaat-3'	3669
	Arrestor	5'-tcactaatagaagggtgcgc-3'	3670
1	Probe	5'-AACGAGGCGCACAAATATCCTGTCC NH2-3'	3671
	Invader	5'-CCCCGTAGAAACCTTACATTTATGGTCCTC-3'	3672
	Stacker	5'-atcaacactgaccatccccctcgt-3'	3673
	Arrestor	5'-ggacaggatattgtgcgc-3'	3674

1	Probe	5'-AACGAGGCGCACCATTTCTGCTG NH2-3'	3675
	Invader	5'-GATTCATCAGCTGCAATTTCTAATCAACTTA-3'	3676
	Stacker	5'-tcgtcattgtacaagtttg-3'	3677
	Arrestor	5'-cagcaggaaatggtgcgc-3'	3678
2	Probe	5'-CCGTCACGCGCTCCATCCAGAG NH2-3'	3679
	Invader	5'-CCTCCAAAAGGAAACTGGAGGTATACTTTA-3'	3680
	Stacker	5'-cctcttggtaactaac-3'	3681
	Arrestor	5'-cctcgtgatggaggcg-3'	3682
1	Probe	5'-AACGAGGCGCACCTTTCAAGGTG NH2-3'	3683
	Invader	5'-CTGTAGGCCCAAGACGTA-3'	3684
	Stacker	5'-acaggcttgcctgt-3'	3685
	Arrestor	5'-cacctgaaaggcgccctcgtt-3'	3686
1	Probe	5'-AACGAGGCGCACTTCACTCCAAAT NH2-3'	3687
	Invader	5'-TCTTGTGGATTGTTGAGAGATCGATGA-3'	3688
	Stacker	5'-gatgtctagtcacalc-3'	3689
	Arrestor	5'-atttggagtgaagtcgcctcgtt-3'	3690
1	Probe	5'-AACGAGGCGCACTCACTCCAAAT NH2-3'	3691
	Invader	5'-TTGTGGATTGTTGAGAGATCGATGTA-3'	3692
	Stacker	5'-gatgtctagtcacalc-3'	3693
	Arrestor	5'-atttggagtgaagtcgcctcgtt-3'	3694
1	Probe	5'-AACGAGGCGCACCATTAATGAAGGAGAG NH2-3'	3695
	Invader	5'-GGGTGAGTGGCCAGTTCATAA-3'	3696
	Stacker	5'-aacactgcctcgtt-3'	3697
	Arrestor	5'-cctccttcattatggtgcgc-3'	3698

h3A4

1	Probe	5'-AACGAGGCGCAGATAATGAAGGAGAG NH2-3'	3699
	Invader	5'-GGTAGTGGCTGTTTCATACC-3'	3700
	Stacker	5'-aacactgctcgtggtt-3'	3701
	Arrestor	5'-ctctcttcattatctgcgc-3'	3702
1	Probe	5'-AACGAGGCGCAGAGAGCAAAACCT NH2-3'	3703
	Invader	5'-ACTCTGATTAGAGCAAGTTTCATGTTTCATC-3'	3704
	Stacker	5'-catgccaatgcagttct-3'	3705
	Arrestor	5'-aggttgctctcgtgcgc-3'	3706
1	Probe	5'-AACGAGGCGCACGTTTCAAGGTG NH2-3'	3707
	Invader	5'-CTGTAGGCCCCCAAGACGTC-3'	3708
	Stacker	5'-acaggctgcctgt-3'	3709
	Arrestor	5'-cacctfgaaacglgcgcctcgtt-3'	3710
1	Probe	5'-AACGAGGCGCACCTTTCAAGGTG NH2-3'	3711
	Invader	5'-CTGTAGGCCCCCAAGACGTGA-3'	3712
	Stacker	5'-acaggctgcctgt-3'	3713
	Arrestor	5'-cacctfgaaaglgcgcctcgtt-3'	3714
1	Probe	5'-AACGAGGCGCACCTCACTCCAAAT NH2-3'	3715
	Invader	5'-TCTTGTGGATTGTTGAGAGAGTCGATGA-3'	3716
	Stacker	5'-gatgctagatcacatc-3'	3717
	Arrestor	5'-attggagtgagglgcgcctcgtt-3'	3718
1	Probe	5'-AACGAGGCGCACCTATAATGAAGGAGAG NH2-3'	3719
	Invader	5'-GGGTGAGTGGCCAGTTCATAA-3'	3720
	Stacker	5'-aacactgctcgtggtt-3'	3721
	Arrestor	5'-ctctcttcattatagtcgc-3'	3722

h3A7

1	Probe	5'-AACGAGGCGCAGATAATGAAGGAGAG NH2-3'	3723
	Invader	5'-GGGTGAGTGGCCAGTTCATATC-3'	3724
	Stacker	5'-aacactgctcgtggtt-3'	3725
	Arrestor	5'-ctctctctcattatctgagc-3'	3726
1	Probe	5'-AACGAGGCGCACCCGAGAGCAAACC NH2-3'	3727
	Invader	5'-TCTGACTAGAGCAAGTTTCATGTTCAA-3'	3728
	Stacker	5'-tcatgccaatgcagtttc-3'	3729
	Arrestor	5'-ggtttgctcgtgagc-3'	3730
1	Probe	5'-AACGAGGCGCAGGAGAGCAAACCT NH2-3'	3731
	Invader	5'-TCTGACTAGAGCAAGTTTCATGTTCAACC-3'	3732
	Stacker	5'-catgccaatgcagtttct-3'	3733
	Arrestor	5'-aggttctgctcctgagc-3'	3734
1	Probe	5'-AACGAGGCGCACAGCATGATAAGCA NH2-3'	3735
	Arrestor	5'-tgcttatcatctgtgagc-3'	3736
	Probe	5'-CCGTACAGCCTCAGCATGATAAGCA NH2-3'	3737
	Arrestor	5'-tgcttatcatctgtgagc-3'	3738
	Invader	5'-GGTGCAGCCCCAGTGAGC-3'	3739
	Stacker	5'-gcaacattaacaccaggatgat-3'	3740
1	Probe	5'-AACGAGGCGCACGGAGGTGAATTAG NH2-3'	3741
	Arrestor	5'-ctaattcacctccgtgagc-3'	3742
	Probe	5'-CCGTACAGCCTCGGAGGTGAATTAG NH2-3'	3743
	Arrestor	5'-ctaattcacctccgtgagc-3'	3744
	Invader	5'-TCACAGCCCCATTTTCTTGTTCAC-3'	3745
	Stacker	5'-tgtaagcaccctgttct-3'	3746
1	Probe	5'-AACGAGGCGCACGGAGGTGAATTA NH2-3'	3747
	Arrestor	5'-taattcacctccgtgagc-3'	3748
	Probe	5'-CCGTACAGCCTCGGAGGTGAATTA NH2-3'	3749
	Arrestor	5'-taattcacctccgtgagc-3'	3750
	Invader	5'-TCACAGCCCCATTTTCTTGTTCAC-3'	3751
	Stacker	5'-gtgtaagcaccctgttct-3'	3752

rat SLC10A1

human CD36

1	Probe	5'-AACGAGGCGCACGACAGATTCCCTTT NH2-3'	3753
	Arrestor	5'-aaaggaatgtgtggtgc-3'	3754
2	Probe	5'-CCGTCACGCCCTCGACAGATTCCCTTT NH2-3'	3755
	Arrestor	5'-aaaggaatgtgtggtggtgc-3'	3756
	Invader	5'-ATGTCGACGTGACCTTCCCAATAGC-3'	3757
	Stacker	5'-taccttattgtgtggtggtgc-3'	3758
1	Probe	5'-AACGAGGCGCACGCTTTTCAACTG NH2-3'	3759
	Arrestor	5'-cagtgaaacacgtgtgc-3'	3760
2	Probe	5'-CCGTCACGCCCTCGCTTTTCAACTG NH2-3'	3761
	Arrestor	5'-cagtgaaacacgtgtggtgc-3'	3762
	Invader	5'-TCTGTGCAGAAACAA TAGTTGTCTGC-3'	3763
	Stacker	5'-gagagcaaggtgc-3'	3764
human SLC21A6			
1	Probe	5'-AACGAGGCGCACCGTATTTGAAGACATAAG NH2-3'	3765
	Invader	5'-GGCTGACCATACTGTGTCTCTAA-3'	3766
	Stacker	5'-taaaagcaaatatagctgt-3'	3767
	Arrestor	5'-cttatgtctcaaatagctgtgc-3'	3768
1	Probe	5'-AACGAGGCGCACCGACAGTAAACAT NH2-3'	3769
	Invader	5'-aggtaaagACAATGACATCAA-3'	3770
	Stacker	5'-gagaattgtcaattccaacg-3'	3771
	Arrestor	5'-atgtttactgtgtgtgc-3'	3772
human SLC21A8			
1	Probe	5'-AACGAGGCGCACCTACATATCCAATATC NH2-3'	3773
	Invader	5'-CTTAGGAGTTATTTCTGATAGTGTCTCAGATA-3'	3774
	Stacker	5'-caggtacatttagcaaacagagat-3'	3775
	Arrestor	5'-gatatgtgatatgtgtgtgc-3'	3776
1	Probe	5'-AACGAGGCGCACCAAGAGGATATCATC NH2-3'	3777
	Invader	5'-cagattagaggaaaTATAGAAAGTTGAAAAA-3'	3778
	Stacker	5'-gaagtaagaaatgaattgtgtcaattcc-3'	3779
	Arrestor	5'-gatgatctctctgtgtgtgc-3'	3780

1	Probe	5'-AACGAGGCGCACTAAATGTGGTACCT NH2-3'	3781
	Invader	5'-CAGGTTGAACAATCTTTCACAGTCAACAAGAA-3'	3782
	Stacker	5'-cctgttcagagaacaaga-3'	3783
	Arrestor	5'-aggtagcacatttagtcgc-3'	3784
human SLC21A9			
1	Probe	5'-AACGAGGCGCACGCTGTTGTC NH2-3'	3785
	Invader	5'-GCTGCAGTTGGTGTAGAAAAACCTGC-3'	3786
	Stacker	5'-cagagcatccitggac-3'	3787
	Arrestor	5'-gacaacagcgtgcgc-3'	3788
1	Probe	5'-AACGAGGCGCACCCAAAAATCCTCA NH2-3'	3789
	Invader	5'-GGCTGGGCATCCAGGA-3'	3790
	Stacker	5'-ggaacatgaactggatgcc-3'	3791
	Arrestor	5'-tgaggatttgggtgcgc-3'	3792
1	Probe	5'-CCGTACGCTCGCTAAGGCTC NH2-3'	3793
	Invader	5'-GTTCAATCCTACCTGACAGGAGATGC-3'	3794
	Stacker	5'-aaagaaggtagatccaggc-3'	3795
	Arrestor	5'-gagccttagcgaggcg-3'	3796
human SULT Pan 1A			
1	Probe	5'-AACGAGGCGCACCCCTTGACCTTC NH2-3'	3797
	Arrestor	5'-gaaggtaagggtgcgc-3'	3798
2	Probe	5'-CCGTACGCTCCCTTGACCTTC NH2-3'	3799
	Arrestor	5'-gaaggtaagggtgcgc-3'	3800
	Invader	5'-TTGCGTTGCGGGCAACATAGACCAA-3'	3801
	Invader	5'-TTGCGTTTCGGGCAACATAGACCAA-3'	3802
	Stacker	5'-tgatccaacagagtctgg-3'	3803
1	Probe	5'-AACGAGGCGCACCCGCGCATCGAAG NH2-3'	3804
	Arrestor	5'-cttcgatgcgggtgcgc-3'	3805
2	Probe	5'-CCGTACGCTCCCGCATCGAAG NH2-3'	3806
	Arrestor	5'-cttcgatgcgggtgcgc-3'	3807
	Invader	5'-CTGCCATCTTCTCCGCATAGTA-3'	3808
	Stacker	5'-cgctcatttgcgc-3'	3809

1	Probe	5'-AACGAGGCGCACCCGCATAGTC NH2-3'	3810
	Arrestor	5'-gactatgagggtgagc-3'	3811
2	Probe	5'-CCGTACAGCCTCCCGCATAGTC NH2-3'	3812
	Arrestor	5'-gactatgagggtgagc-3'	3813
	Invader	5'-TGCAGCCTGCCATCTTCTA-3'	3814
	Stacker	5'-ggcatgaagcgctca-3'	3815
human UGT Pan 1A			
1	Probe	5'-AACGAGGCGCACCAATTGCCATAGC NH2-3'	3816
	Arrestor	5'-gctatggcaattggtgagc-3'	3817
2	Probe	5'-CCGTACAGCCTCCAAATTGCCATAGC NH2-3'	3818
	Arrestor	5'-gctatggcaattggtgagc-3'	3819
	Invader	5'-GAGGGA TTTTGCCCAAGCATCAGA-3'	3820
	Stacker	5'-tttctctctggaattctg-3'	3821
1	Probe	5'-AACGAGGCGCACCGCTTTGCATT NH2-3'	3822
	Arrestor	5'-aatgcaaaagcgtgagc-3'	3823
2	Probe	5'-CCGTACAGCCTCCGCTTTGCATT NH2-3'	3824
	Arrestor	5'-aatgcaaaagcgtgagc-3'	3825
	Invader	5'-CAGCTCCCTTAGTCTCCATGA-3'	3826
	Stacker	5'-gtccatctgatacccaaac-3'	3827
1	Probe	5'-AACGAGGCGCACCCGACGGCCAA NH2-3'	3828
	Arrestor	5'-ttggccgtcgggtgagc-3'	3829
2	Probe	5'-CCGTACAGCCTCCGACGGCCAA NH2-3'	3830
	Arrestor	5'-ttggccgtcgggtgagc-3'	3831
	Invader	5'-GTGATGAAGGCCACTGTGAGCAA-3'	3832
	Stacker	5'-gaggaaaccaatcacgtcc-3'	3833

Secondary system		Oligo Sequence (5' to 3')		SEQ ID NO
FRET probe		FL-CAC-Z28-TGC TTC GTG G		3834
Secondary Reaction Template 1		CCA GGA AGC AAG TGG TGC GCC TCG tt		3835
Secondary Reaction Template 2		CCA GGA AGC AAG TGG AGG CGT GAC ggt		3836
Secondary Reaction Template 3		CCA GGA AGC AAG TGA CGC AGC GAC ggt		3837
SRT # Oligo Type		Oligo Sequence (5' to 3')		SEQ ID NO
hCEACAM5	1 Probe	AACGAGGCGCACACTGTGAGCAGGA-NH ₂		3838
	Invader	GGTCCAGAAAGGTTAGAAGTGAGGCA		3839
	Stacker	gcctctgccagg		3840
	Arrestor	tctgtctacagtgcgc		3841
hCEACAM5	1 Probe	AACGAGGCGCACAAATCACTGCGCC-NH ₂		3842
	Invader	CCATAGAGGACATTCAGGATGACTGC		3843
	Stacker	tggcactcactggg		3844
	Arrestor	tctgtctacagtgcgc		3845
hCEACAM5	1 Probe	AACGAGGCGCACAAATCACTGCGC-NH ₂		3846
	Stacker	ctggcactcactgg		3847
	Arrestor	gcgcagtgtattgtgcgc		3848
hCEACAM5	2 Probe	CCGTCACGCCCTCCTTGCTGTGT-NH ₂		3849
	Invader	GGTCTGGGTTTCACATTTGTAGA		3850
	Stacker	cattctgtgacattgaatagagt		3851
	Arrestor	acacagcaaggaggcgc		3852
hCEACAM5	1 Probe	AACGAGGCGCACCCACTGAGTAGA-NH ₂		3853
	Invader	GGTCCTACATCATTCCTTGTGAA		3854
	Stacker	gtgagggtcctgtt		3855
	Arrestor	tctactcagtgtgtgcgc		3856

hCEACAM5	1 Probe Invader Stacker Arrestor	AACGAGGCGCACTTGCTGGAT-NH ₂ TTGGAGATAAAGAGCTCTTGTGTGTGA gttcccatcaatcaga atccagcaagtgcgc	3857 3858 3859 3860
hNOS2A	2 Probe Invader Arrestor	CCGTCACGCCCTCGTTTCTATCTCCTTTGT-NH ₂ CGTCAGTTGGTCGGTTCCTGTTC acaaaggagatagaaacgagggcg	3861 3862 3863
hNOS2A	2 Probe Invader Stacker Arrestor	CCGTCACGCCCTCGTTTCTATCTC-NH ₂ CGTCAGTTGGTCGGTTCCTGTTC ctttgtaccgctcc gagatagaaacgagggcg	3864 3865 3866 3867
hOSM	1 Probe Invader Stacker Arrestor	AACGCGGCGCACTGTTGTTCT-NH ₂ GCTGGGCCATGCAGTAGAA gagccgaggatgt aggaaacacagtcgc	3868 3869 3870 3871
hOSM	1 Probe Stacker	AACGAGGCGCACTGTTGTTCC-NH ₂ tgagcccaggatgt	3872 3873
hOSM	1 Probe Invader Stacker Arrestor	AACGAGGCGCACGTCTGAGTTGT-NH ₂ GTGGGCTCAGCCGTC ccagcagctggg acaacacagcgtgcgc	3874 3875 3876 3877
hICAM	2 Probe Invader Stacker Arrestor	CCGTCACGCCCTCGGCTTGTGTGTTCC-NH ₂ CCGGATAGGTTACGGGAGGCGTC ggtttcattggggtcct gaacacacaagccgagggcg	3878 3879 3880 3881

hICAM	1 Probe Invader Stacker Arrestor	AACGAGGCGCACGGCTTGTGT-NH ₂ GATAGGTTACAGGGAGGCGTC gttcggtttcatgggg acacaagccgtgcgc	3882 3883 3884 3885
hICAM	1 Probe Invader Stacker Arrestor	AACGAGGCGCACGTATTTCTTGATCTTC-NH ₂ TTTTGGCCCTGTTGTAGTCTC cgctggcgttatagag gaagatcaagaatacgtgcgc	3886 3887 3888 3889
hICAM	1 Probe Invader Stacker Arrestor	AACGAGGCGCACACCATGGC-NH ₂ CTAGTGTTTTAGGTGTGCAGGTC cccaaatgctgtgtatct gccatggtgtgcgc	3890 3891 3892 3893
hICAM	1 Probe Invader Stacker Arrestor	AACGAGGCGCACACCATGGCC-NH ₂ CTAGTGTTTTAGGTGTGCAGGTC cccaaatgctgtgtatctga ggccatggtgtgcgc	3894 3895 3896 3897
Neomycin	1 Probe Invader Stacker Arrestor	AACGCGGCGCACGCCATTTTCCAC-NH ₂ CCACAGTCGATGAATCCAGAAAAGCGA catgatattcggcaagcag tggaaaatggcgtgcgc	3898 3899 3900 3901
Neomycin	1 Probe Stacker	AACGCGGCGCACGCCATTTTCCA-NH ₂ ccatgatattcggcaagcag	3902 3903

Neomycin	1 Probe	AACGAGGGCGCACAGTTCATTCA-NH ₂	3904
	Invader	CGCTGCCTCGTCCTGA	3905
	Stacker	ggcaccggacagg	3906
	Arrestor	cigaatgaactggtgcgc	3907
hMMP3	2 Probe	CCGTCACGCGCTCGTCCATTGTTCA-NH ₂	3908
	Invader	TGTCCTCGTTGTATCCTTTC	3909
	Stacker	tcataatcaaaagtgggca	3910
	Arrestor	tgaacaatggacgagggcg	3911
hMMP3	2 Probe	CCGTCACGCGCTCGTCCATTGTTCA-NH ₂	3912
	Stacker	catcatcaaaagtgggcatc	3913
	Arrestor	atgaacaatggacgagggcg	3914
hMMP13	1 Probe	AACGAGGGCGCACTCAAGGGATAAGGA-NH ₂	3915
	Invader	CCTCGGAGACTGGTAATGGCAA	3916
	Stacker	agggtcacattgtctg	3917
	Arrestor	tccttatccctfagtgcg	3918
hMMP13	2 Probe	CCGTCGCTGCGTTTCTTCCC-NH ₂	3919
	Invader	CAAGCTTTCTCCTGATAGCTCA	3920
	Stacker	ctaccccgacttc	3921
	Arrestor	gggaagaaacgcag	3922
hMMP13	2 Probe	CCGTCGCTGCGTTTCTTCCCC-NH ₂	3923
	Stacker	taccccgacttct	3924
	Arrestor	ggggaagaaacgcag	3925
hMMP13	1 Probe	AACGAGGGCGCACGGCATCAAGG-NH ₂	3926
	Invader	GTTTCTCCTCGGAGACTGGTAATC	3927
	Stacker	gataaggaagggtcacatttg	3928
	Arrestor	ccttgatgccgtgcgc	3929

hMMP13	1 Probe Invader Stacker Arrestor	AACGAGGCGCACTCTTCTTCC-NH ₂ GAACCAAGCTTTTCTCCTGATAGCA cctacccgcact ggaagaagagtgcg	3930 3931 3932 3933
hLipc	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCTTTTGTTCGA-NH ₂ AGAGTGATGGGAATTTTCTGCATTTTCTA gtagtacatgtaaaagtgtt tcggaacaaaaggcg	3934 3935 3936 3937
hLipc	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCTTTTGTTCG-NH ₂ AGAGTGATGGGAATTTTCTGCATTTTCTA agtagtacatgtaaaagtgt cggaacaaaaggcg	3938 3939 3940 3941
hLipc	2 Probe Stacker Arrestor	CCGTCACGCCTCTTTTGTTCGA-NH ₂ gtagtacatgtaaaagtgtt tcggaacaaaaggcg	3942 3943 3944
hLipc	2 Probe Arrestor	CCGTCACGCCTCTTTTGTTCG-NH ₂ cggaacaaaaggcg	3945 3946
r/m Lipc	2 Probe Invader Stacker Arrestor	CCGTCACGCCTCGGAGTCAAT-NH ₂ GCAGGTTGCTGTGTGCAAC gaagaggcacagaacg attgactccgaggcg	3947 3948 3949 3950
r/m Lipc	1 Probe Invader Stacker Arrestor	AACGAGGCGCACTGATGGGAATTTTC-NH ₂ GTAATTCCTTCGCCCAGGGA tttatcttctttgtccc gaaattcccatcagtcgc	3951 3952 3953 3954

r/m Lipc	1 Probe Invader Stacker Arrestor	AACGAGGCGCACTGCTTCTTCA-NH ₂ TCTCTTGACTCATCTGCTCTTTA giccttgactcaggc tgaagaagcagtgccg	3955 3956 3957 3958
r/m Lipc	1 Probe Invader Stacker Arrestor	AACGAGGCGCACTGCTTCTTCA-NH ₂ TCTCTTGACTCATCTGCTCTTTA ccttgactcaggcac actgaagaagcagtgccg	3959 3960 3961 3962
hVCAM	2 Probe Invader Stacker Arrestor	CCGTCACGCCCTCGCCTTTGTTG-NH ₂ GGGCAACATTGACATAAAGTGTTGCGTACTCTC ggctgaattccatgcatc caacaaaggcgaggcg	3963 3964 3965 3966
hVCAM	1 Probe Invader Stacker Arrestor	AACGAGGCGCACATGTGTAATTTAGCT-NH ₂ GTGGGCACAGAAATCCATTTCAATCAC cggaacaagaactttcca agctaaattacacatgagcg	3967 3968 3969 3970
hVCAM	1 Probe Stacker Arrestor	AACGAGGCGCACATGTGTAATTTAGCT-NH ₂ ggcaacaagaactttccaat gagctaaattacacatgagcg	3971 3972 3973
hVCAM	1 Probe Invader Stacker Arrestor	AACGAGGCGCACGCCCTTTGTTG-NH ₂ GCAACATTGACATAAAGTGTTGCGTACTCTC ggctgaattccatgcat caacaaaggcgaggcg	3974 3975 3976 3977
hVCAM	2 Probe Invader Stacker Arrestor	CCGTCACGCCCTCGCCTTTGTTG-NH ₂ GCAACATTGACATAAAGTGTTGCGTACTCTC ggctgaattccatgcat caacaaaggcgaggcg	3978 3979 3980 3981

hRPL19	1 Probe Invader Stacker Arrestor	AAGCAGGCGCACCTTCCTTGG-NH ₂ CTCTTCACGGCGCTTGCGTGA tcttagacctgcgagcc ccaaggaagggtgcgc	3982 3983 3984 3985
hRPL19	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCTTCCTTGG-NH ₂ GCTCTTCACGGCGCTTGCGA gtcttagacctgcgagcc caaggaagcagtgccg	3986 3987 3988 3989
r/m RPL19	1 Probe Invader Stacker Arrestor	AAGCAGGCGCACCTTCCTTGG-NH ₂ CTCCCGGCGCTTTCGTGA tcttagacctgcgagcc ccaaggaagggtgcgc	3990 3991 3992 3993
r/m RPL19	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCTTCCTTGG-NH ₂ CCTCCCGGCGCTTTCGA gtcttagacctgcgagcc caaggaagcagtgccg	3994 3995 3996 3997
h18S rRNA	Probe Probe Probe INVADER oligonucleotide Stacker Stacker Arrestor	Red-CGA-EQ-TTTTACTTCC Red-CGA-EQ-TTTTACTTCCCTCT FI-CGACTTTTACTTCCCTCT GGTTCACCTACGGAACCTTGTAA tctagatagtcaggttcgaccg tctagatagtcaggttcgaccgtctctc agaggaagtaaaattcg	3998 3999 4000 4001 4002 4003 4004

FIGURE 50

